Saskatchewan
Energy and Mines

Petroleum
and Natural Gas

Miscellaneous Report 86

Reservoir Annual 1985

Saskatchewan

PREFACE

The 1985 Reservoir Annual has been compiled to consolidate pertinent information on all oil and gas reservoirs in Saskatchewan into a convenient reference manual. The main sections of the report contain oil and gas reserves data, development and producing data and information concerning enhanced recovery projects. The remaining sections present related reservoir information.

Publication of the Reservoir Annual commenced in 1963 and has since undergone a number of changes to improve the presentation and to increase the amount of information that is useful to both industry and government.

I would like to acknowledge the assistance of the oil and gas companies operating in Saskatchewan for submitting to the department much of the material that has been used in the preparation of this report.

Patricia A. Smith
Minister of Energy and Mines

Although the Department of Energy and Mines has exercised all reasonable care in the compilation, interpretation and production of this report, it is not possible to ensure total accuracy, and all persons who rely on the information contained herein do so at their own risk. The Department of Energy and Mines and the Government of Saskatchewan do not accept liability for any errors, omissions or inaccuracies that may be included in, or derived from, this report.

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INTRODUCTION

INTRODUCTION

The 1985 Reservoir Annual is published by Saskatchewan Energy and Mines to provide current statistical information with regard to performance and reservoir parameters of Saskatchewan oil and gas pools. The 1985 edition is subdivided into eleven sections, each dealing with a specific type of reservoir data. Section B presents maps showing oil and gas pools, production and disposition areas, well spacing areas and other related information. Of considerable importance are sections C and D, which provide reservoir data and reserves for all provincial oil and gas pools broken down by unit and non-unit areas. Section E contains a listing of oil and gas units and enhanced recovery projects and provides such information as operator, producing zone, number of active wells and project data such as pattern type, commencement date and injection rates. The section titled 'Development and Producing Data' presents information such as well spacing, depletion mechanism, capable and active wellcounts and average well production rates for Saskatchewan oil and gas pools. The remaining five sections include illustrations of typical producing well logs, pool pressure data, Maximum Permissive Rate factors, gas plant performance plots and formation water resistivity measurements. All reserve, production, pool boundary and well spacing information contained in this publication is as of December 31, 1985, unless otherwise noted.

The reserve values contained in the Reservoir Annual are "established reserves" as adopted from the recommendations of the Joint Industry/Government Task Force on Uniform Reserves Terminology. Established reserves are defined as those reserves recoverable under current technology and present and anticipated economic conditions, specifically proved by drilling, testing or production, plus that judgement portion of contiguous recoverable reserves that are interpreted to exist from geological, geophysical or similar information, with reasonable certainty.

Provincial oil Production in 1985 was about 11.6 million cubic metres, an increase of nearly 0.8 million cubic metres compared to 1984 production. This reflects a continuation of good crude market conditions, and another record number of new well completions. Initial recoverable oil reserves increased by over 20.3 million cubic metres due to the 2874 successfully drilled oil wells, however this was reduced to a net value of about 15.7 million cubic metres because of better definition of existing reserves. There were significant reserve increases in all areas due to this drilling, but the most notable increases were in Area I (Lloydminster) and Area IV (Weyburn-Estevan). Reserve increases exceeded production for the third year in a row, resulting in a remaining established reserves figure of over 111.9 million cubic metres. Table I provides a more detailed look at changes in oil reserves for the year.

Natural gas production in 1985 was 1.93 billion cubic metres, exceeding the 1984 production by over 18%. Initial reserves of gas were increased by 6.97 billion cubic metres in 1985, resulting in a net increase of 5.03 billion cubic metres and a remaining reserves year-end value of 63.27 billion cubic metres. These reserve increases were largely due to the continued high rate of gas well drilling which resulted in 437 completions in 1985.

The objective of this publication is to provide subscribers in the oil and gas industry with reliable and pertinent information on provincial oil and gas resources and any suggestions or comments on improvements in this regard would be welcomed by Saskatchewan Energy and Mines.

TABLE 1

REMAINING OIL RESERVES IN SASKATCHEWAN

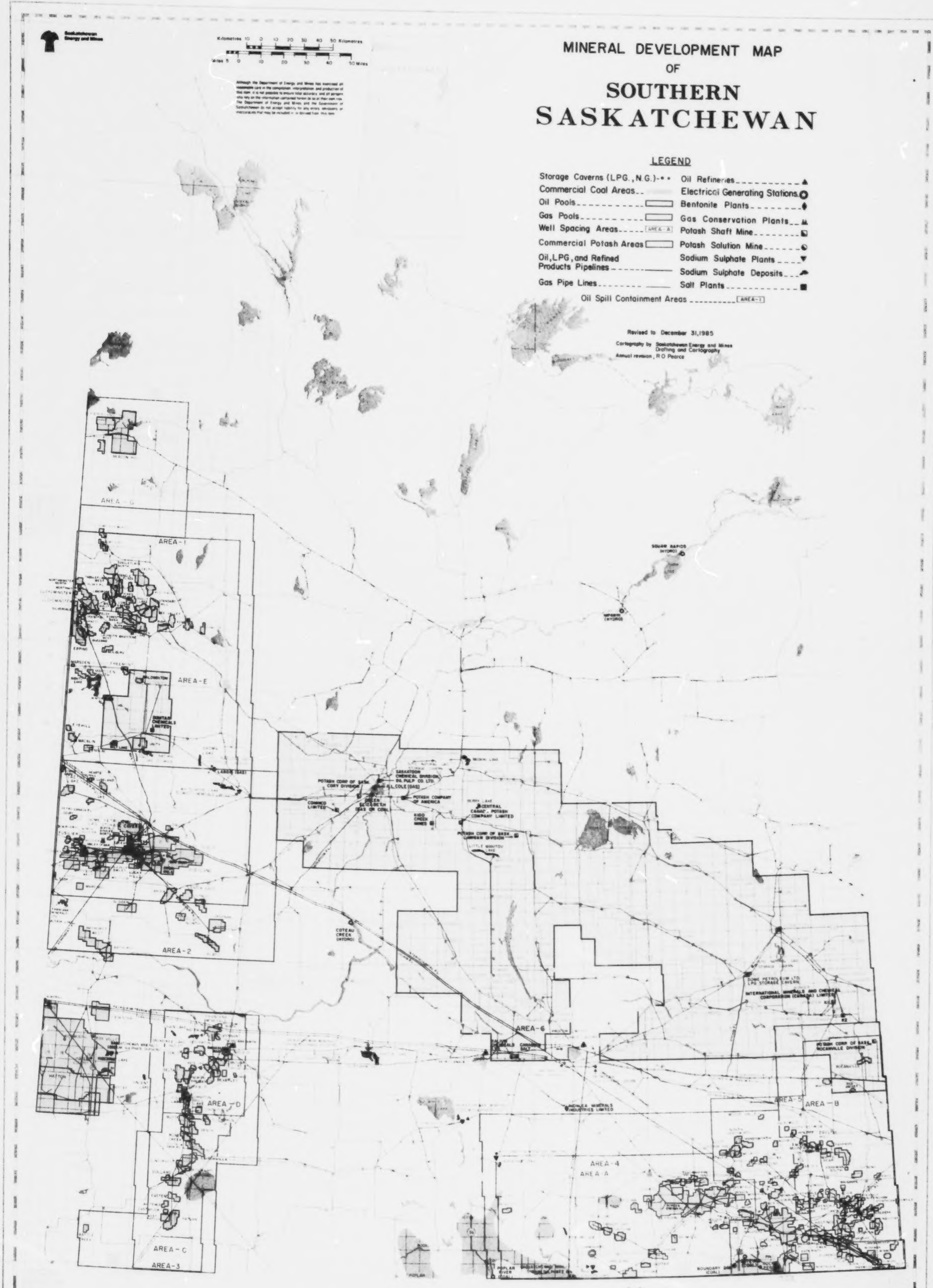
(Million Cubic Metres)

	Remaining Established Reserves (Dec. 31/84)	1985 Additions to Reserves			1985 Production	Net Change in Reserves During 1985	Remaining Established Reserves (Dec. 31/85)
		Revisions	Drilling	Total			
Area I - Heavy	27.268	-1.117	+4.986	+3.869	3.063	+0.806	28.074
Area II - Heavy	8.611	-0.631	+0.971	+0.340	0.771	-0.431	8.180
Area II - Light	8.836	-0.817	+2.336	+1.519	1.218	+0.301	9.137
Area III - Medium	14.587	+0.524	+1.875	+2.399	1.781	+0.618	15.205
Area IV - Medium	24.442	-2.983	+4.774	+1.791	2.047	-0.256	24.186
Area IV - Light	24.031	+0.414	+5.402	+5.816	2.703	+3.113	27.144
PROVINCIAL TOTAL	107.775	-4.610	+20.344	+15.734	11.583	+4.151	111.926

POOL AND AREA

MAPS

MINERAL DEVELOPMENT MAP
OF
SOUTHERN SASKATCHEWAN

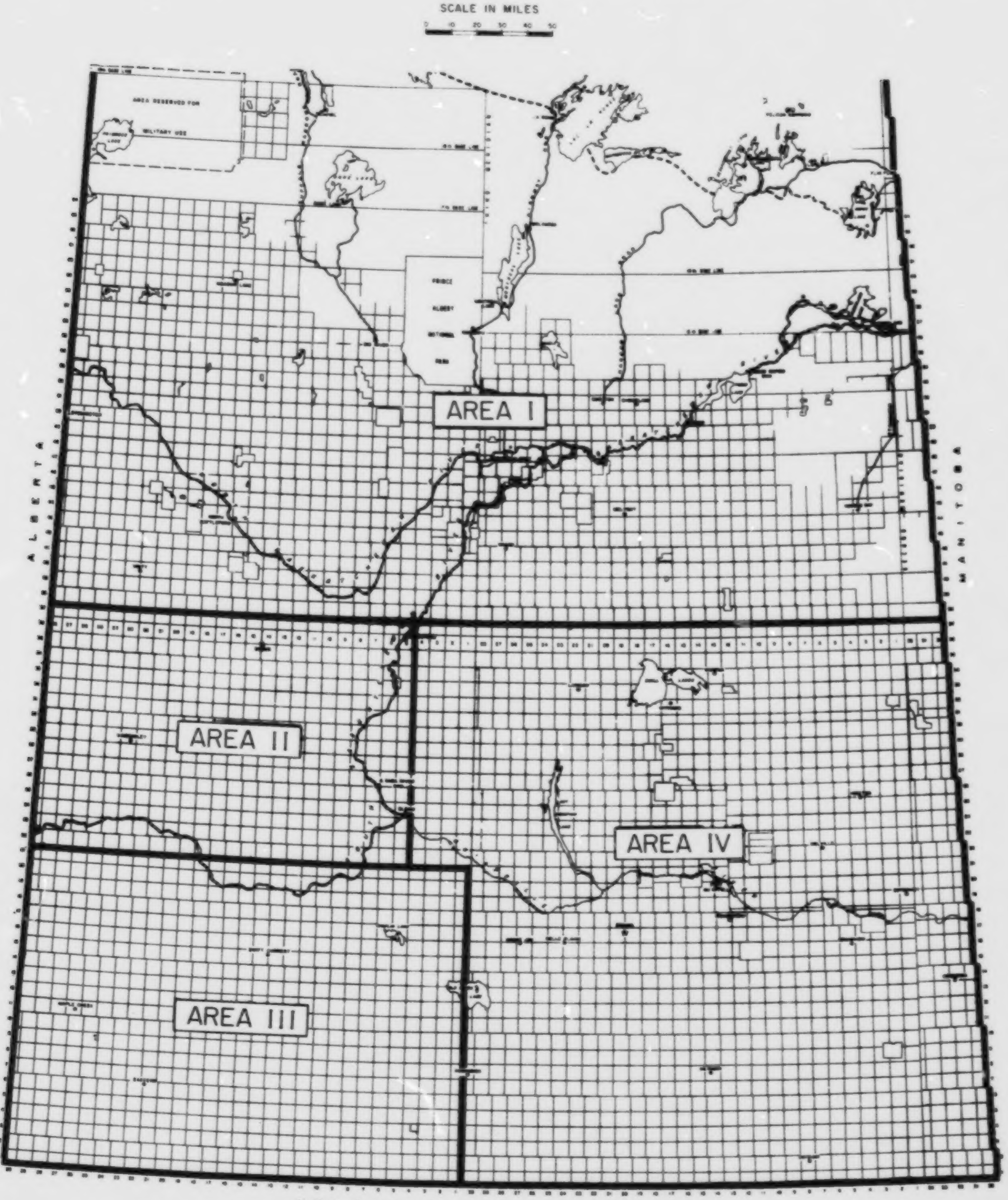

Saskatchewan Energy and Mines
Kilometres 10 0 10 20 30 40 50 Kilometres
Miles 5 0 10 20 30 40 50 Miles
LEGEND
Storage Caverns (LPG., N.G.) • •
Commercial Coal Areas
Oil Pools
Gas Pools
Well Spacing Areas AREA - A
Commercial Potash Areas
Oil, LPG, and Refined Products Pipelines
Gas Pipe Lines
Oil Refineries ▲
Electrical Generating Stations ✪
Bentonite Plants ♦
Gas Conservation Plants
Potash Shaft Mine ◪
Potash Solution Mine ◐
Sodium Sulphate Plants ▼
Sodium Sulphate Deposits
Salt Plants ■
Oil Spill Containment Areas AREA-1
SQUAW RAPIDS (HYDRO)
NIPAWIN (HYDRO)
AREA-G
AREA-1
AREA-E
AREA-2
AREA-D
AREA-C
AREA-3
AREA-6
AREA-4
AREA-A
AREA-5
AREA-B
EPPING
MARSDEN
DOMTAR CHEMICALS LIMITED
LASHBURN (GAS)
POTASH CORP OF SASK. CORY DIVISION
COMINCO LIMITED
SASKATOON CHEMICAL DIVISION, SK. PULP CO. LTD.
A.L. COLE (GAS)
QUEEN ELIZABETH (GAS OR COAL)
POTASH COMPANY OF AMERICA
KIDD CREEK MINES
CENTRAL CANADA POTASH COMPANY LIMITED
POTASH CORP OF SASK. LANIGAN DIVISION
LITTLE MANITOU LAKE
COTEAU CREEK (HYDRO)
HATTON
DOME PETROLEUM LTD. LPG STORAGE CAVERN
INTERNATIONAL MINERALS AND CHEMICAL CORPORATION (CANADA) LIMITED
POTASH CORP OF SASK. ROCANVILLE DIVISION
ROCANVILLE
CANADIAN SALT
MIDWEST MINERALS INDUSTRIES LIMITED
POPLAR RIVER (COAL)
BOUNDARY DAM (COAL)
POPLAR

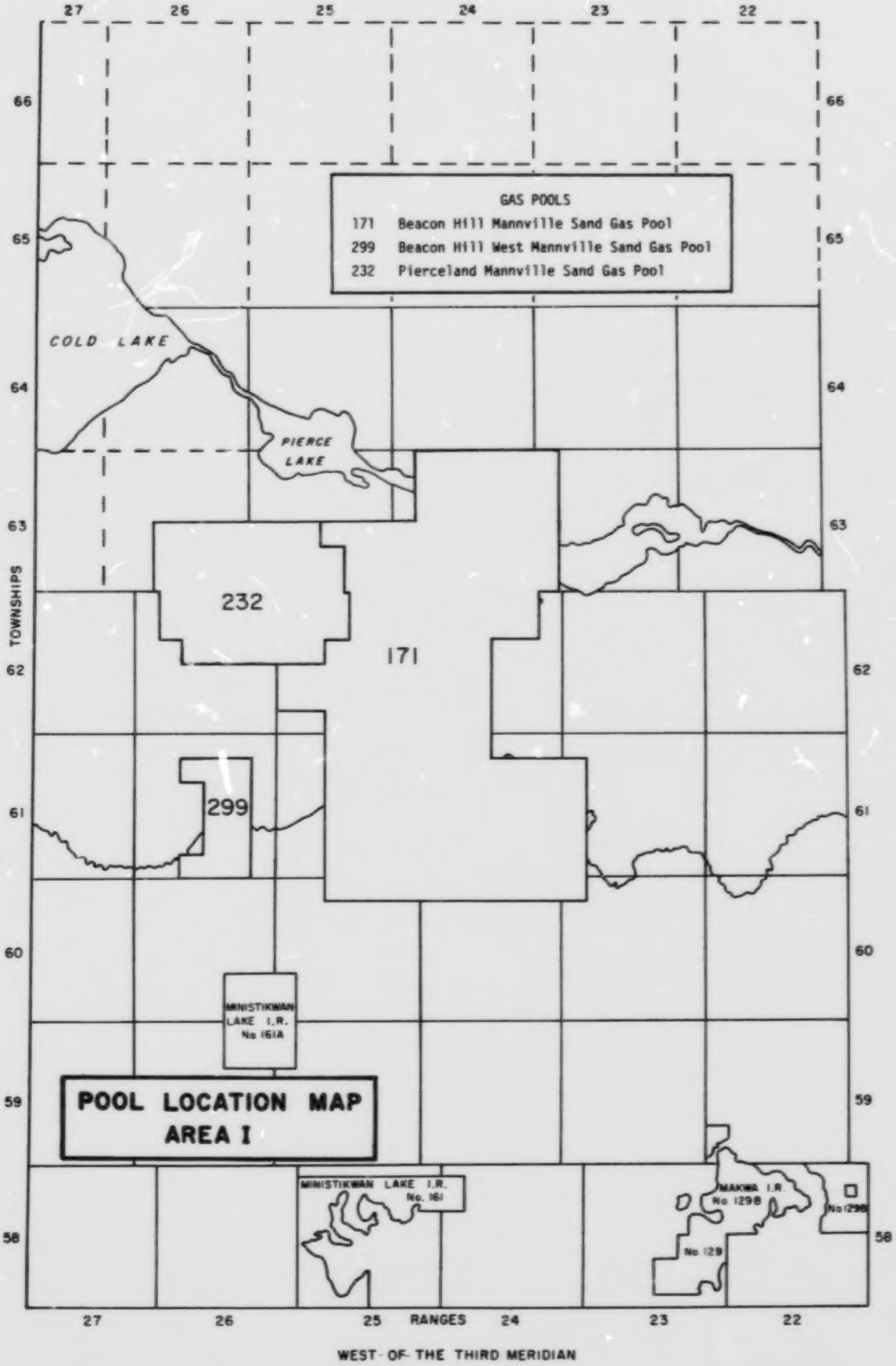
Although the Department of Energy and Mines has exercised all reasonable care in the compilation, interpretation and production of this map, it is not possible to ensure total accuracy, and all persons who rely on the information contained herein do so at their own risk. The Department of Energy and Mines and the Government of Saskatchewan do not accept liability for any errors, omissions or inaccuracies that may be included in, or derived from, this map.

Revised to December 31, 1985

Cartography by Saskatchewan Energy and Mines
Drafting and Cartography
Annual revision, R O Pearce

SASKATCHEWAN
PETROLEUM AND NATURAL GAS
PRODUCTION AND DISPOSITION AREAS


SCALE IN MILES
0 10 20 30 40 50
AREA RESERVED FOR
MILITARY USE
PRINCE
ALBERT
NATIONAL
PARK
AREA I
AREA II
AREA III
AREA IV
ALBERTA
MANITOBA
UNITED STATES OF AMERICA



POOL LOCATION MAP
AREA I

GAS POOLS
171 Beacon Hill Mannville Sand Gas Pool
299 Beacon Hill West Mannville Sand Gas Pool
232 Pierceland Mannville Sand Gas Pool
27
26
25
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66
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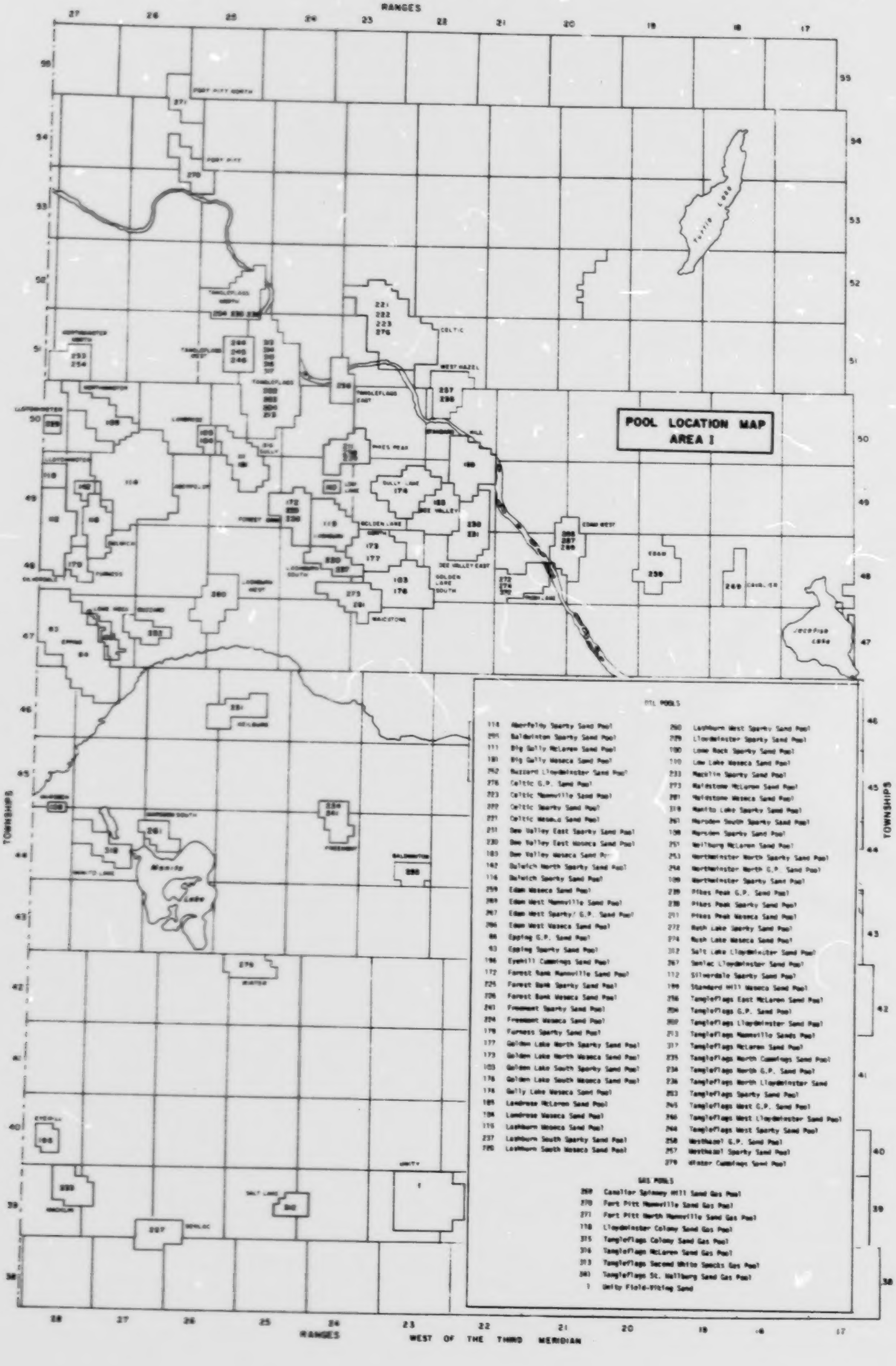
62
61
60
59
58
TOWNSHIPS
COLD LAKE
PIERCE LAKE
232
171
299
MINISTIKWAN LAKE I.R. No 161A
MINISTIKWAN LAKE I.R. No. 161
MAKWA I.R. No 129B
No 129
No 129B
RANGES
WEST OF THE THIRD MERIDIAN


RANGES
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TOWNSHIPS
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PORT PITT NORTH
PORT PITT
TANGLEFLAGS NORTH
TANGLEFLAGS WEST
TANGLEFLAGS
TANGLEFLAGS EAST
CELTIC
WEST HAZEL
LLOYDMINSTER
PIKES PEAK
GULLY LAKE
DEE VALLEY
DEE VALLEY EAST
GOLDEN LAKE NORTH
GOLDEN LAKE SOUTH
FOREST BANK
LASHBURN
LASHBURN SOUTH
LASHBURN WEST
MAIDSTONE
EDAM WEST
EDAM
CAVALIER
Jackfish Lake
Turtle Lake
EPPING
LONE ROCK
BUZZARD
FURNESS
NEILBURG
FREEMONT
BALDWINTON
MARSDEN
MARSDEN SOUTH
MANITO LAKE
Manito Lake
EYEHILL
MACKLIN
SALT LAKE
SENLAC
UNITY
WINTER
28
RANGES
WEST OF THE THIRD MERIDIAN

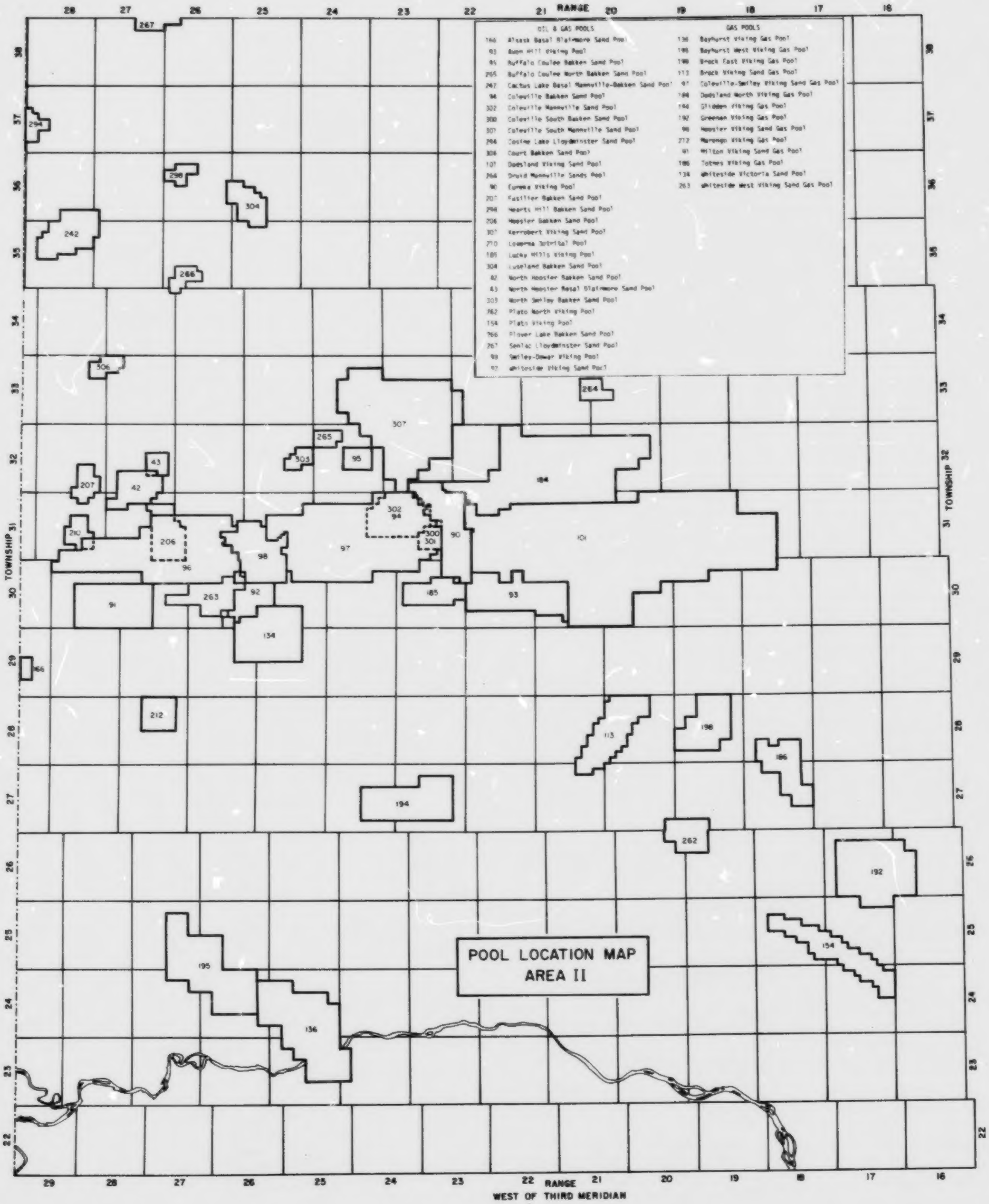
POOL LOCATION MAP
AREA I

OIL POOLS

114	Aberfeldy Sparky Sand Pool
291	Baldwinton Sparky Sand Pool
111	Big Gully McLaren Sand Pool
181	Big Gully Waseca Sand Pool
252	Buzzard Lloydminster Sand Pool
276	Celtic G.P. Sand Pool
223	Celtic Mannville Sand Pool
222	Celtic Sparky Sand Pool
221	Celtic Waseca Sand Pool
231	Dee Valley East Sparky Sand Pool
230	Dee Valley East Waseca Sand Pool
180	Dee Valley Waseca Sand Pool
182	Dulwich North Sparky Sand Pool
116	Dulwich Sparky Sand Pool
259	Edam Waseca Sand Pool
289	Edam West Mannville Sand Pool
287	Edam West Sparky/ G.P. Sand Pool
286	Edam West Waseca Sand Pool
84	Epping G.P. Sand Pool
83	Epping Sparky Sand Pool
196	Eyehill Cummings Sand Pool
172	Forest Bank Mannville Sand Pool
225	Forest Bank Sparky Sand Pool
226	Forest Bank Waseca Sand Pool
241	Freemont Sparky Sand Pool
224	Freemont Waseca Sand Pool
179	Furness Sparky Sand Pool
177	Golden Lake North Sparky Sand Pool
173	Golden Lake North Waseca Sand Pool
103	Golden Lake South Sparky Sand Pool
176	Golden Lake South Waseca Sand Pool
174	Gully Lake Waseca Sand Pool
105	Landrose McLaren Sand Pool
104	Landrose Waseca Sand Pool
115	Lashburn Waseca Sand Pool
237	Lashburn South Sparky Sand Pool
220	Lashburn South Waseca Sand Pool
260	Lashburn West Sparky Sand Pool
229	Lloydminster Sparky Sand Pool
100	Lone Rock Sparky Sand Pool
110	Low Lake Waseca Sand Pool
233	Macklin Sparky Sand Pool
273	Maidstone McLaren Sand Pool
281	Maidstone Waseca Sand Pool
318	Manito Lake Sparky Sand Pool
261	Marsden South Sparky Sand Pool
108	Marsden Sparky Sand Pool
251	Neilburg McLaren Sand Pool
253	Northminster North Sparky Sand Pool
254	Northminster North G.P. Sand Pool
109	Northminster Sparky Sand Pool
239	Pikes Peak G.P. Sand Pool
238	Pikes Peak Sparky Sand Pool
211	Pikes Peak Waseca Sand Pool
272	Rush Lake Sparky Sand Pool
274	Rush Lake Waseca Sand Pool
312	Salt Lake Lloydminster Sand Pool
267	Senlac Lloydminster Sand Pool
112	Silverdale Sparky Sand Pool
199	Standard Hill Waseca Sand Pool
256	Tangleflags East McLaren Sand Pool
204	Tangleflags G.P. Sand Pool
202	Tangleflags Lloydminster Sand Pool
213	Tangleflags Mannville Sands Pool
317	Tangleflags McLaren Sand Pool
235	Tangleflags North Cummings Sand Pool
234	Tangleflags North G.P. Sand Pool
236	Tangleflags North Lloydminster Sand
203	Tangleflags Sparky Sand Pool
245	Tangleflags West G.P. Sand Pool
246	Tangleflags West Lloydminster Sand Pool
244	Tangleflags West Sparky Sand Pool
258	Westhazel G.P. Sand Pool
257	Westhazel Sparky Sand Pool
279	Winter Cummings Sand Pool

GAS POOLS

269	Cavalier Spinney Hill Sand Gas Pool
270	Fort Pitt Mannville Sand Gas Pool
271	Fort Pitt North Mannville Sand Gas Pool
118	Lloydminster Colony Sand Gas Pool
315	Tangleflags Colony Sand Gas Pool
316	Tangleflags McLaren Sand Gas Pool
313	Tangleflags Second White Specks Gas Pool
341	Tangleflags St. Wallburg Sand Gas Pool
1	Unity Field-Viking Sand


POOL LOCATION MAP
AREA II
RANGE
WEST OF THIRD MERIDIAN
TOWNSHIP
OIL & GAS POOLS
166 Alsask Basal Blairmore Sand Pool
93 Avon Hill Viking Pool
95 Buffalo Coulee Bakken Sand Pool
265 Buffalo Coulee North Bakken Sand Pool
242 Cactus Lake Basal Mannville-Bakken Sand Pool
94 Coleville Bakken Sand Pool
302 Coleville Mannville Sand Pool
300 Coleville South Bakken Sand Pool
301 Coleville South Mannville Sand Pool
294 Cosine Lake Lloydminster Sand Pool
306 Court Bakken Sand Pool
101 Dodsland Viking Sand Pool
264 Druid Mannville Sands Pool
90 Eureka Viking Pool
207 Fusilier Bakken Sand Pool
298 Hearts Hill Bakken Sand Pool
206 Hoosier Bakken Sand Pool
307 Kerrobert Viking Sand Pool
210 Loverna Detrital Pool
185 Lucky Hills Viking Pool
304 Luseland Bakken Sand Pool
42 North Hoosier Bakken Sand Pool
43 North Hoosier Basal Blairmore Sand Pool
303 North Smiley Bakken Sand Pool
262 Plato North Viking Pool
154 Plato Viking Pool
266 Plover Lake Bakken Sand Pool
267 Senlac Lloydminster Sand Pool
98 Smiley-Dewar Viking Pool
92 Whiteside Viking Sand Pool
GAS POOLS
136 Bayhurst Viking Gas Pool
195 Bayhurst West Viking Gas Pool
198 Brock East Viking Gas Pool
113 Brock Viking Sand Gas Pool
97 Coleville-Smiley Viking Sand Gas Pool
184 Dodsland North Viking Gas Pool
194 Glidden Viking Gas Pool
192 Greenan Viking Gas Pool
96 Hoosier Viking Sand Gas Pool
212 Marengo Viking Gas Pool
91 Milton Viking Sand Gas Pool
186 Totnes Viking Gas Pool
134 Whiteside Victoria Sand Pool
263 Whiteside West Viking Sand Gas Pool
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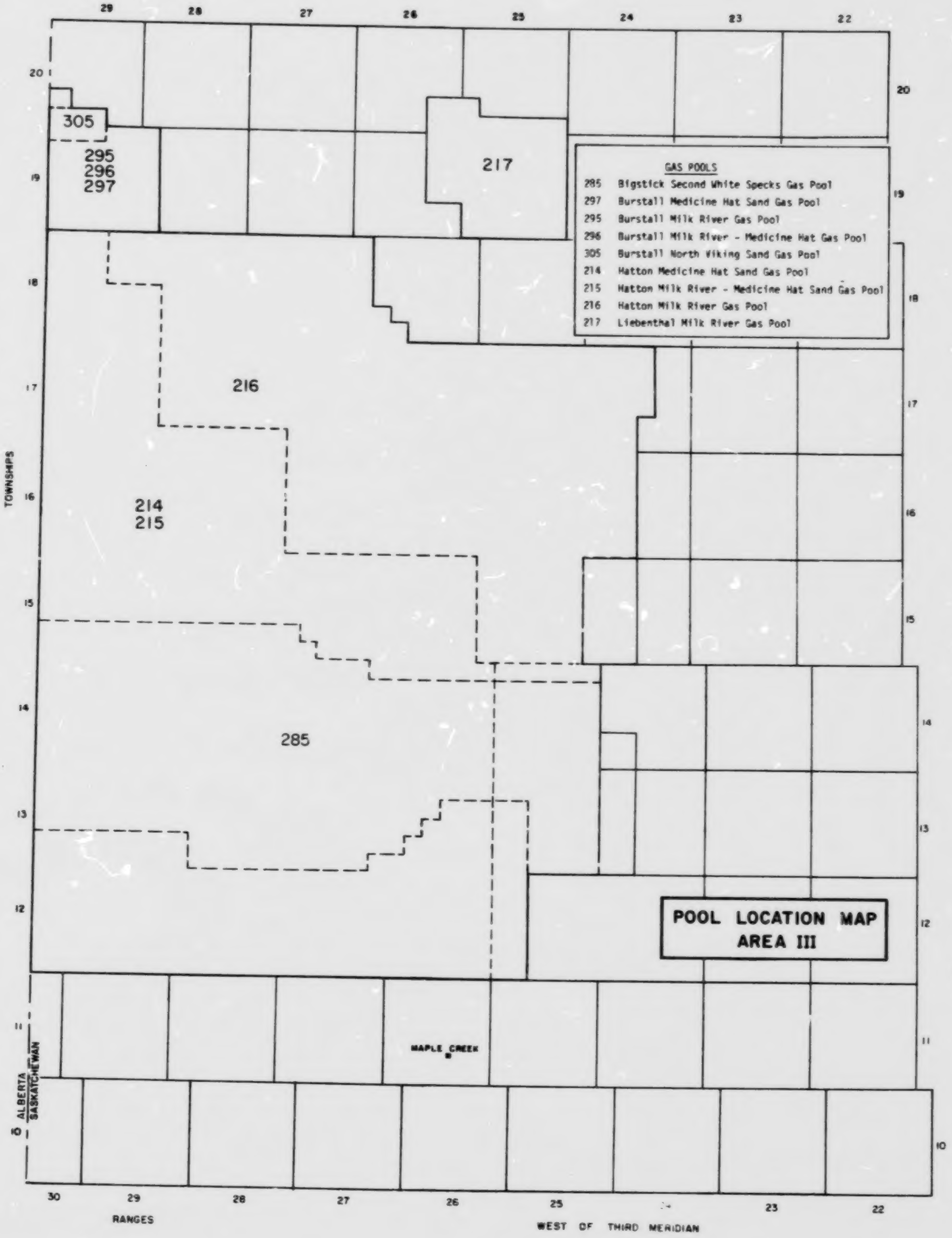
GAS POOLS
285 Bigstick Second White Specks Gas Pool
297 Burstall Medicine Hat Sand Gas Pool
295 Burstall Milk River Gas Pool
296 Burstall Milk River - Medicine Hat Gas Pool
305 Burstall North Viking Sand Gas Pool
214 Hatton Medicine Hat Sand Gas Pool
215 Hatton Milk River - Medicine Hat Sand Gas Pool
216 Hatton Milk River Gas Pool
217 Liebenthal Milk River Gas Pool
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MAPLE CREEK
ALBERTA
SASKATCHEWAN
TOWNSHIPS
RANGES
WEST OF THIRD MERIDIAN
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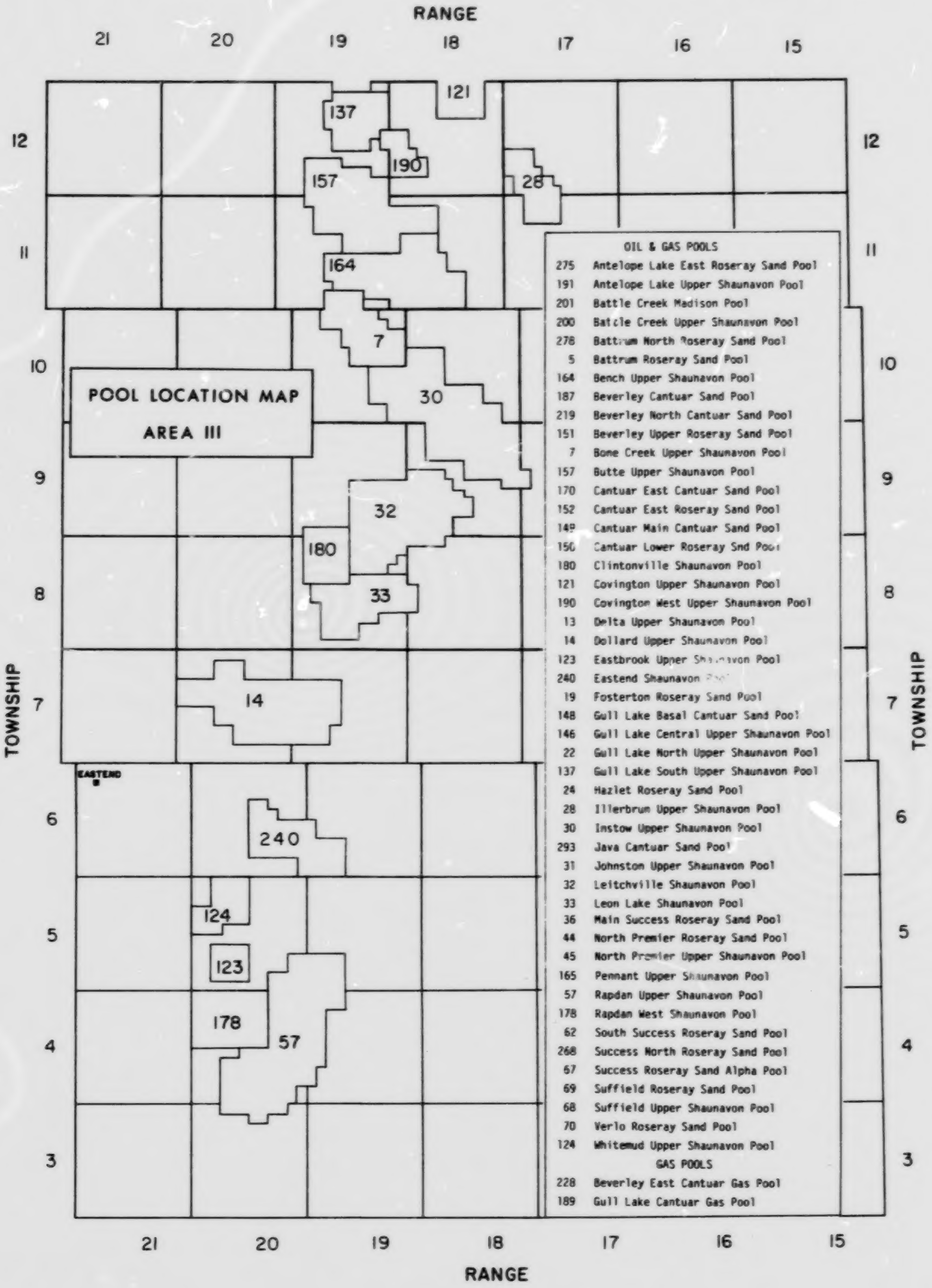
POOL LOCATION MAP
AREA III

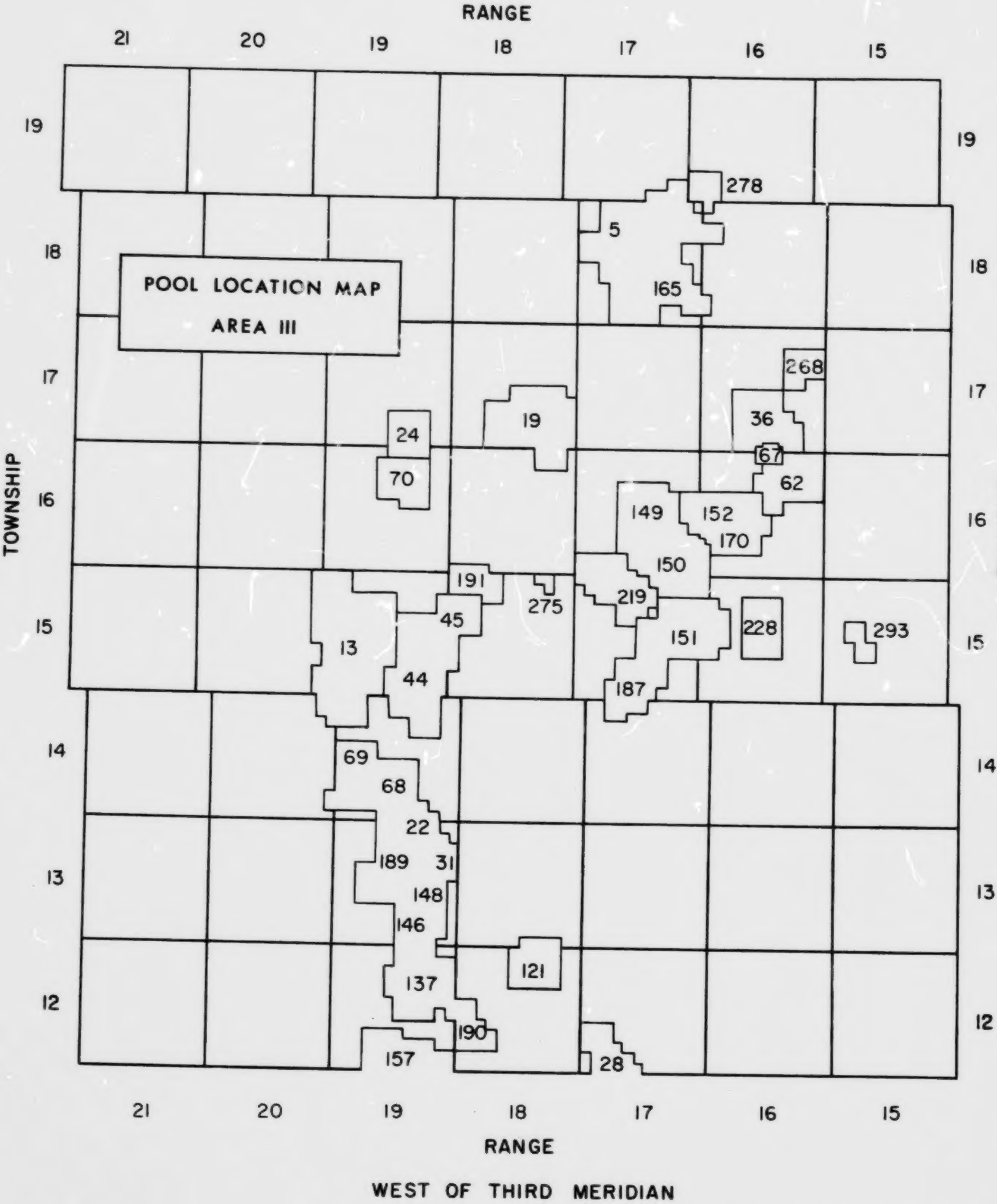


POOL LOCATION MAP

AREA III

OIL & GAS POOLS	
275	Antelope Lake East Roseray Sand Pool
191	Antelope Lake Upper Shaunavon Pool
201	Battle Creek Madison Pool
200	Battle Creek Upper Shaunavon Pool
278	Battrum North Roseray Sand Pool
5	Battrum Roseray Sand Pool
164	Bench Upper Shaunavon Pool
187	Beverley Cantuar Sand Pool
219	Beverley North Cantuar Sand Pool
151	Beverley Upper Roseray Sand Pool
7	Bone Creek Upper Shaunavon Pool
157	Butte Upper Shaunavon Pool
170	Cantuar East Cantuar Sand Pool
152	Cantuar East Roseray Sand Pool
149	Cantuar Main Cantuar Sand Pool
150	Cantuar Lower Roseray Snd Pool
180	Clintonville Shaunavon Pool
121	Covington Upper Shaunavon Pool
190	Covington West Upper Shaunavon Pool
13	Delta Upper Shaunavon Pool
14	Dollard Upper Shaunavon Pool
123	Eastbrook Upper Shaunavon Pool
240	Eastend Shaunavon Pool
19	Fosterton Roseray Sand Pool
148	Gull Lake Basal Cantuar Sand Pool
146	Gull Lake Central Upper Shaunavon Pool
22	Gull Lake North Upper Shaunavon Pool
137	Gull Lake South Upper Shaunavon Pool
24	Hazlet Roseray Sand Pool
28	Illerbrun Upper Shaunavon Pool
30	Instow Upper Shaunavon Pool
293	Java Cantuar Sand Pool
31	Johnston Upper Shaunavon Pool
32	Leitchville Shaunavon Pool
33	Leon Lake Shaunavon Pool
36	Main Success Roseray Sand Pool
44	North Premier Roseray Sand Pool
45	North Premier Upper Shaunavon Pool
165	Pennant Upper Shaunavon Pool
57	Rapdan Upper Shaunavon Pool
178	Rapdan West Shaunavon Pool
62	South Success Roseray Sand Pool
268	Success North Roseray Sand Pool
67	Success Roseray Sand Alpha Pool
69	Suffield Roseray Sand Pool
68	Suffield Upper Shaunavon Pool
70	Verlo Roseray Sand Pool
124	Whitemud Upper Shaunavon Pool
GAS POOLS	
228	Beverley East Cantuar Gas Pool
189	Gull Lake Cantuar Gas Pool

WEST OF THIRD MERIDIAN


RANGE
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TOWNSHIP
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POOL LOCATION MAP
AREA III
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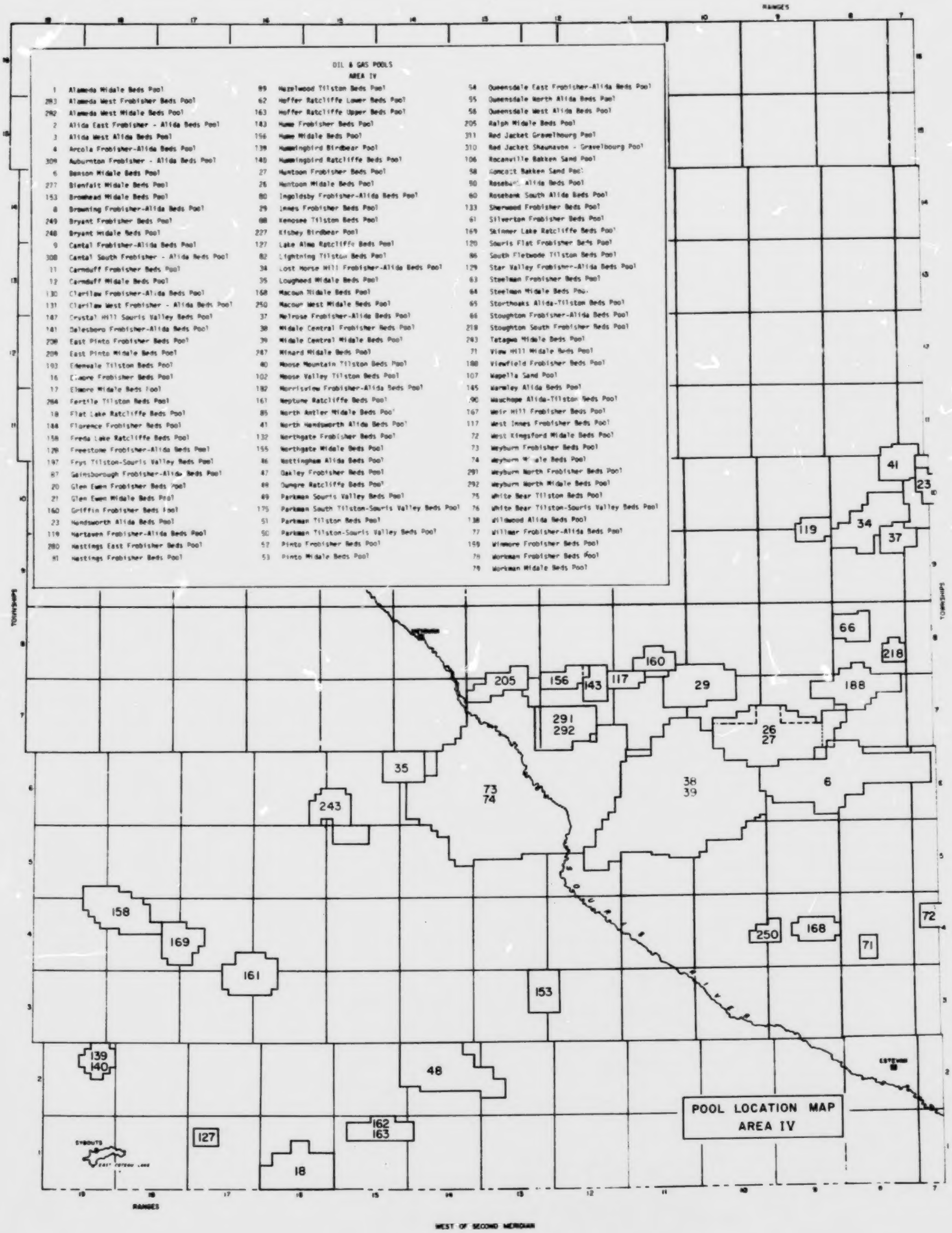
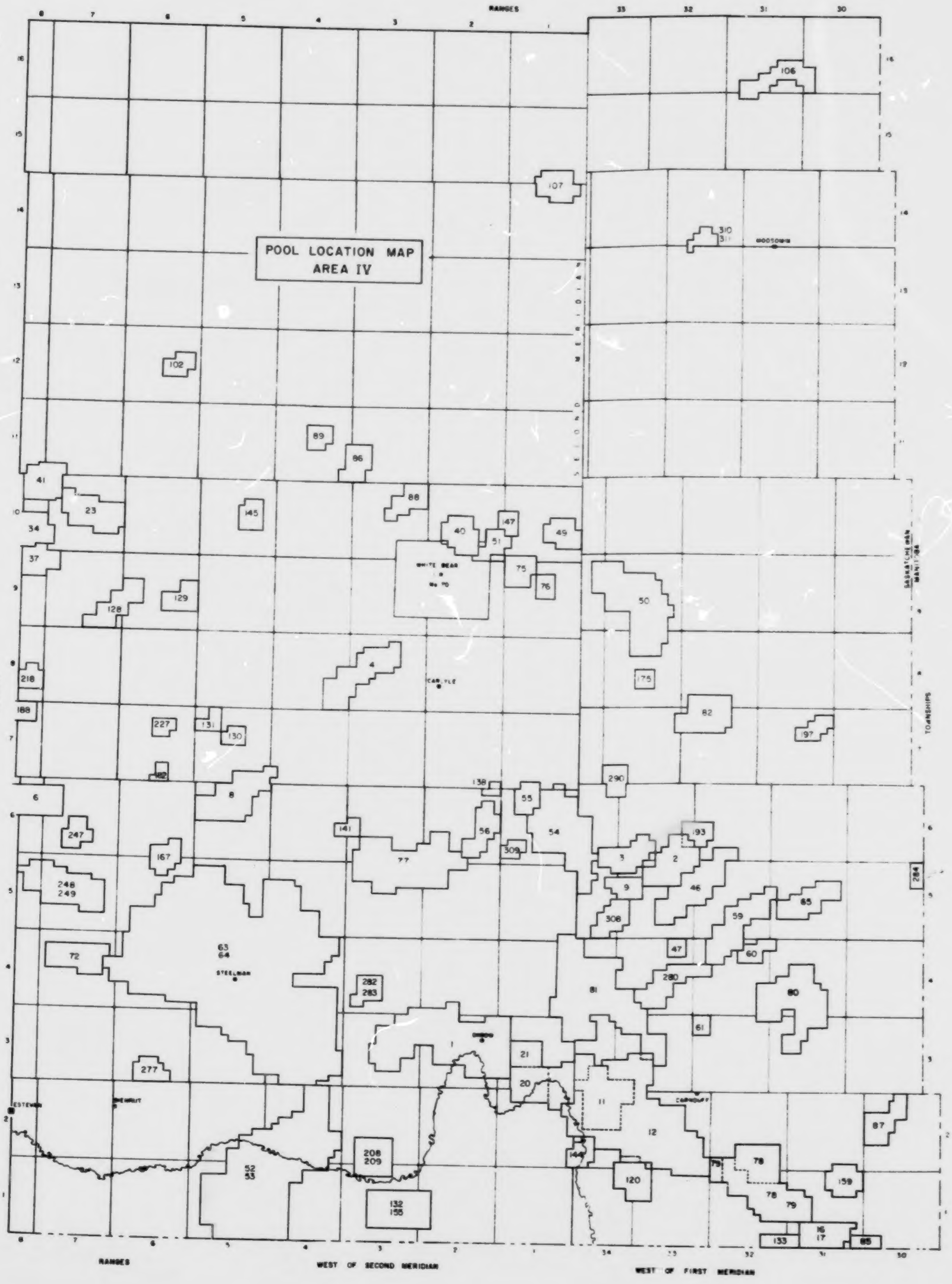
RANGE
WEST OF THIRD MERIDIAN



POOL LOCATION MAP
AREA IV

OIL & GAS POOLS
AREA IV

1	Alameda Midale Beds Pool	89	Hazelwood Tilston Beds Pool	54	Queensdale East Frobisher-Alida Beds Pool
283	Alameda West Frobisher Beds Pool	62	Hoffer Ratcliffe Lower Beds Pool	55	Queensdale North Alida Beds Pool
292	Alameda West Midale Beds Pool	163	Hoffer Ratcliffe Upper Beds Pool	56	Queensdale West Alida Beds Pool
2	Alida East Frobisher - Alida Beds Pool	143	Hume Frobisher Beds Pool	205	Ralph Midale Beds Pool
3	Alida West Alida Beds Pool	156	Hume Midale Beds Pool	311	Red Jacket Gravelbourg Pool
4	Arcola Frobisher-Alida Beds Pool	139	Hummingbird Birdbear Pool	310	Red Jacket Shaunavon - Gravelbourg Pool
309	Auburnton Frobisher - Alida Beds Pool	140	Hummingbird Ratcliffe Beds Pool	106	Rocanville Bakken Sand Pool
6	Benson Midale Beds Pool	27	Huntoon Frobisher Beds Pool	58	Roncott Bakken Sand Pool
277	Bienfait Midale Beds Pool	26	Huntoon Midale Beds Pool	59	Rosebank Alida Beds Pool
153	Bromhead Midale Beds Pool	80	Ingoldsby Frobisher-Alida Beds Pool	60	Rosebank South Alida Beds Pool
8	Browning Frobisher-Alida Beds Pool	29	Innes Frobisher Beds Pool	133	Sherwood Frobisher Beds Pool
249	Bryant Frobisher Beds Pool	88	Kenosee Tilston Beds Pool	61	Silverton Frobisher Beds Pool
248	Bryant Midale Beds Pool	227	Kisbey Birdbear Pool	169	Skinner Lake Ratcliffe Beds Pool
9	Cantal Frobisher-Alida Beds Pool	127	Lake Alma Ratcliffe Beds Pool	120	Souris Flat Frobisher Beds Pool
308	Cantal South Frobisher - Alida Beds Pool	82	Lightning Tilston Beds Pool	86	South Fletwode Tilston Beds Pool
11	Carnduff Frobisher Beds Pool	34	Lost Horse Hill Frobisher-Alida Beds Pool	129	Star Valley Frobisher-Alida Beds Pool
12	Carnduff Midale Beds Pool	35	Lougheed Midale Beds Pool	63	Steelman Frobisher Beds Pool
130	Clarilaw Frobisher-Alida Beds Pool	168	Macoun Midale Beds Pool	64	Steelman Midale Beds Pool
131	Clarilaw West Frobisher - Alida Beds Pool	250	Macoun West Midale Beds Pool	65	Storthoaks Alida-Tilston Beds Pool
187	Crystal Hill Souris Valley Beds Pool	37	Melrose Frobisher-Alida Beds Pool	66	Stoughton Frobisher-Alida Beds Pool
141	Dalesboro Frobisher-Alida Beds Pool	38	Midale Central Frobisher Beds Pool	218	Stoughton South Frobisher Beds Pool
208	East Pinto Frobisher Beds Pool	39	Midale Central Midale Beds Pool	283	Tatagwa Midale Beds Pool
209	East Pinto Midale Beds Pool	287	Minard Midale Beds Pool	71	View Hill Midale Beds Pool
193	Edenvale Tilston Beds Pool	40	Moose Mountain Tilston Beds Pool	188	Viewfield Frobisher Beds Pool
16	Elmore Frobisher Beds Pool	102	Moose Valley Tilston Beds Pool	107	Wapella Sand Pool
17	Elmore Midale Beds Pool	182	Morrisview Frobisher-Alida Beds Pool	145	Wawmley Alida Beds Pool
284	Fertile Tilston Beds Pool	161	Neptune Ratcliffe Beds Pool	90	Wauchope Alida-Tilston Beds Pool
18	Flat Lake Ratcliffe Beds Pool	85	North Antler Midale Beds Pool	167	Weir Hill Frobisher Beds Pool
144	Florence Frobisher Beds Pool	41	North Handsworth Alida Beds Pool	117	West Innes Frobisher Beds Pool
158	Freda Lake Ratcliffe Beds Pool	132	Northgate Frobisher Beds Pool	72	West Kingsford Midale Beds Pool
128	Freestone Frobisher-Alida Beds Pool	155	Northgate Midale Beds Pool	73	Weyburn Frobisher Beds Pool
197	Frys Tilston-Souris Valley Beds Pool	86	Nottingham Alida Beds Pool	74	Weyburn Midale Beds Pool
87	Gainsborough Frobisher-Alida Beds Pool	47	Oakley Frobisher Beds Pool	291	Weyburn North Frobisher Beds Pool
20	Glen Ewen Frobisher Beds Pool	48	Oungre Ratcliffe Beds Pool	292	Weyburn North Midale Beds Pool
21	Glen Ewen Midale Beds Pool	49	Parkman Souris Valley Beds Pool	75	White Bear Tilston Beds Pool
160	Griffin Frobisher Beds Pool	175	Parkman South Tilston-Souris Valley Beds Pool	76	White Bear Tilston-Souris Valley Beds Pool
23	Handsworth Alida Beds Pool	51	Parkman Tilston Beds Pool	138	Wildwood Alida Beds Pool
119	Hartaven Frobisher-Alida Beds Pool	50	Parkman Tilston-Souris Valley Beds Pool	77	Willmar Frobisher-Alida Beds Pool
280	Hastings East Frobisher Beds Pool	52	Pinto Frobisher Beds Pool	159	Winmore Frobisher Beds Pool
81	Hastings Frobisher Beds Pool	53	Pinto Midale Beds Pool	78	Workman Frobisher Beds Pool
				79	Workman Midale Beds Pool



POOL LOCATION MAP
AREA IV

RANGES
TOWNSHIPS
SECOND MERIDIAN
SASKATCHEWAN
MANITOBA
WHITE BEAR I.R. No 70
CARLYLE
STEELMAN
OXBOW
CARNDUFF
ESTEVAN
BIENFAIT
WEST OF SECOND MERIDIAN
WEST OF FIRST MERIDIAN

RESERVOIR DATA RESERVES AND PRODUCTION – OIL

FIVE YEAR OIL SUMMARY

	1981	1982	1983	1984	1985
	INITIAL RECOVERABLE RESERVES		(Million Cubic Metres)		
Area I - Heavy	49.697	51.910	57.176	61.198	65.070
Area II - Heavy	14.009	15.362	16.146	18.740	19.077
Area II - Light	16.732	17.507	19.299	22.208	23.730
Area III - Medium	88.486	88.965	89.635	90.700	93.096
Area IV - Medium	102.606	98.776	100.593	101.844	103.600
Area IV - Light	111.729	116.510	119.565	124.200	130.043
PROVINCIAL TOTAL	383.259	389.030	402.414	418.890	434.617
	REMAINING RECOVERABLE RESERVES		(Million Cubic Metres)		
Area I - Heavy	23.073	23.233	26.029	27.268	28.074
Area II - Heavy	6.082	6.765	6.820	8.611	8.180
Area II - Light	5.466	5.757	6.877	8.836	9.137
Area III - Medium	17.225	16.292	15.341	14.587	15.205
Area IV - Medium	28.095	24.990	25.145	24.442	24.186
Area IV - Light	20.644	21.226	21.906	24.031	27.144
PROVINCIAL TOTAL	100.585	98.263	102.118	107.775	111.926
	YEARLY PRODUCTION	(Million Cubic Metres)			
Area I - Heavy	2.039	2.051	2.479	2.780	3.063
Area II - Heavy	0.565	0.672	0.730	0.801	0.771
Area II - Light	0.490	0.486	0.670	0.950	1.218
Area III - Medium	1.310	1.422	1.622	1.811	1.781
Area IV - Medium	1.611	1.702	1.704	1.949	2.047
Area IV - Light	1.377	1.771	2.330	2.502	2.703
PROVINCIAL TOTAL	7.392	8.104	9.535	10.793	11.583
	NUMBER OF PRODUCING WELLS				
Area I - Heavy	2 206	2 454	2 733	3 015	3 522
Area II - Heavy	540	579	640	697	738
Area II - Light	1 178	1 398	1 856	2 656	3 437
Area III - Medium	903	906	948	1 042	1 226
Area IV - Medium	1 519	1 487	1 604	1 873	2 103
Area IV - Light	1 564	2 137	2 330	2 615	2 941
PROVINCIAL TOTAL	7 910	8 961	10 111	11 898	13 967
	AVERAGE DAILY PRODUCTION	(Cubic Metres Per Day)			
Area I - Heavy	5 525	6 163	7 043	7 730	9 225
Area II - Heavy	1 670	1 925	2 037	2 127	2 073
Area II - Light	1 334	1 564	2 054	2 824	3 652
Area III - Medium	4 390	4 794	4 629	4 495	4 751
Area IV - Medium	5 542	4 780	5 011	5 479	4 706
Area IV - Light	3 019	6 689	6 388	7 251	7 426
PROVINCIAL TOTAL	21 480	25 913	27 163	29 906	31 833

AREA I - HEAVY

POOL	PRODUCING HORIZON	ORIGINAL OIL IN PLACE MILLION M3	ESTIMATED RECOVERY			INITIAL RESERVES			CUMMULATIVE PRODUCTION DEC 31/85	REMAINING RESERVES	1985 PROD. 1000 M3
			PRIMARY	ENHANCED	TOTAL	PRIMARY	ENHANCED	TOTAL			
				PER CENT				MILLION CUBIC METRES			
ABERFELDY	SPARKY SAND (UNIT)	53.558	8.30	2.10	10.40	4.445	1.125	5.570	5.005	0.565	136.683
	SPARKY SAND (S. ABFDY SPKY VOL UNIT)	23.605	5.70	1.00	6.70	1.346	0.236	1.582	1.442	0.140	28.387
	SPARKY SAND (NON-UNIT)	11.461	4.20	0.00	4.20	0.481	0.000	0.481	0.298	0.183	23.813
BALDWINTON	SPARKY SAND	1.609	5.40	0.00	5.40	0.087	0.000	0.087	0.051	0.036	5.886
BIG GULLY	MCLAREN SAND (VOLUNTARY UNIT NO. 1)	9.860	5.70	2.30	8.00	0.562	0.227	0.789	0.752	0.136	24.206
	WASECA SAND (VOLUNTARY UNIT NO. 1)	2.306	2.80	1.50	4.30	0.065	0.035	0.099			
	MCLAREN SAND (NON-UNIT)	0.681	5.30	0.00	5.30	0.036	0.000	0.036	0.028	0.008	1.339
	WASECA SAND (NON-UNIT)	0.351	4.90	0.00	4.90	0.017	0.000	0.017	0.011	0.006	1.177
BUZZARD	LLOYDMINSTER SAND	4.738	4.80	0.00	4.80	0.227	0.000	0.227	0.097	0.130	21.488
CELTIC	G.P. SAND	21.588	8.60	0.40	9.00	1.857	0.086	1.943	0.200	3.572	106.266
	SPARKY SAND	20.740	3.70	0.00	3.70	0.767	0.000	0.767	0.109		34.929
	WASECA SAND	51.897	2.50	0.40	2.90	1.297	0.208	1.505	0.309		106.231
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.025		2.231
DEE VALLEY	WASECA SAND	17.973	6.90	0.00	6.90	1.240	0.000	1.240	0.290	0.950	44.676
DEE VALLEY EAST	SPARKY SAND	4.514	2.90	0.00	2.90	0.131	0.000	0.131	0.022	0.109	3.824
	WASECA SAND	4.430	6.90	0.00	6.90	0.306	0.000	0.306	0.049	0.257	8.791
DULWICH	SPARKY SAND	15.350	8.00	4.20	12.20	1.228	0.645	1.873	1.660	0.213	25.432
DULWICH NORTH	SPARKY SAND (N. DULWICH VOL UNIT)	1.151	5.50	14.50	20.00	0.063	0.167	0.230	0.209	0.021	3.209
	SPARKY SAND (NON-UNIT)	0.033	1.60	0.00	1.60	0.001	0.000	0.001	0.000	0.001	0.000
EDAM	WASECA SAND	6.265	1.65	0.00	1.65	0.103	0.000	0.103	0.031	0.072	3.827
EDAM WEST	SPARKY/G.P. SANDS	23.380	4.60	0.00	4.60	1.075	0.000	1.075	0.171	1.415	75.892
	WASECA SAND	10.139	6.00	0.00	6.00	0.608	0.000	0.608	0.059		39.785
	MANNVILLE SANDS	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.039		20.324
EPPING	G.P. SAND (S. EPPING UNIT)	4.310	3.00	1.40	4.40	0.129	0.060	0.190	2.468	0.353	48.759
	SPARKY SAND (S. EPPING UNIT)	23.924	5.00	6.00	11.00	1.196	1.435	2.632			
	SPARKY SAND (SW EPPING VOL UNIT 1)	10.778	5.40	5.70	11.10	0.582	0.614	1.196	0.839	0.357	32.133
	G.P. SAND (NON-UNIT)	12.864	3.50	0.00	3.50	0.450	0.000	0.450	0.378	0.072	8.870
	SPARKY SAND (NON-UNIT)	34.571	5.20	0.00	5.20	1.798	0.000	1.798	1.547	0.251	46.241
EYEHILL	CUMMINGS SAND	10.228	1.00	3.80	4.80	0.102	0.389	0.491	0.124	0.367	21.641
FOREST BANK	SPARKY SAND	8.271	5.80	0.00	5.80	0.480	0.000	0.480	0.142	0.531	12.289
	WASECA SAND	6.270	6.40	0.00	6.40	0.401	0.000	0.401	0.145		9.183
	MANNVILLE SANDS (COMMINGLED)	0.531	0.00	0.00	0.00	0.000	0.000	0.000	0.063		6.016
FREEMONT	SPARKY SAND	2.369	6.90	0.00	6.90	0.163	0.000	0.163	0.086	0.077	11.037
	WASECA SAND	3.358	5.50	0.00	5.50	0.185	0.000	0.185	0.144	0.041	7.886
FURNESS	SPARKY SAND	6.879	8.20	0.00	8.20	0.564	0.000	0.564	0.381	0.183	21.639
GOLDEN LAKE NORTH	SPARKY SAND (GOLDEN LAKE VOL UNIT)	9.262	4.00	1.00	5.00	0.370	0.093	0.463	1.507	0.361	51.943
	WASECA SAND (GOLDEN LAKE VOL UNIT)	14.262	7.85	2.00	9.85	1.120	0.285	1.405			
	SPARKY SAND (NON-UNIT)	6.643	3.70	0.00	3.70	0.246	0.000	0.246	0.115	0.131	21.345
	WASECA SAND (NON-UNIT)	5.040	7.60	0.00	7.60	0.383	0.000	0.383	0.325	0.058	11.612
GOLDEN LAKE SOUTH	SPARKY SAND	26.554	2.80	3.60	6.40	0.744	0.956	1.699	0.636	1.063	51.502
	WASECA SAND	19.477	12.30	0.20	12.50	2.396	0.039	2.435	1.524	0.911	99.892
GULLY LAKE	WASECA SAND (VOLUNTARY UNIT NO. 1)	10.986	5.70	3.70	9.40	0.626	0.406	1.033	0.700	0.333	50.522
	WASECA SAND (NON-UNIT)	12.659	9.10	0.00	9.10	1.152	0.000	1.152	0.686	0.466	66.631
LANDROSE	MCLAREN SAND	2.850	2.84	0.00	2.84	0.081	0.000	0.081	0.081	0.000	0.000
	WASECA SAND	2.219	5.37	0.00	5.37	0.119	0.000	0.119	0.113	0.006	2.610
LASHBURN	WASECA SAND (LASH. WASECA VOL UNIT)	18.059	3.38	3.00	6.38	0.610	0.542	1.152	0.777	0.375	49.879
	WASECA SAND (NON-UNIT)	4.639	3.95	0.00	3.95	0.183	0.000	0.183	0.135	0.048	8.585
LASHBURN SOUTH	SPARKY SAND	1.061	3.68	0.00	3.68	0.039	0.000	0.039	0.025	0.014	2.691
	WASECA SAND	7.739	4.00	0.00	4.00	0.310	0.000	0.310	0.153	0.157	20.644
LASHBURN WEST	SPARKY SAND	5.916	1.80	0.00	1.80	0.106	0.000	0.106	0.036	0.070	5.643
LLOYDMINSTER	SPARKY SAND	2.413	7.20	0.00	7.20	0.174	0.000	0.174	0.141	0.033	9.681
LONE ROCK	SPARKY SAND	8.979	12.40	4.10	16.50	1.113	0.368	1.482	1.240	0.242	40.306
LOW LAKE	WASECA SAND	1.527	4.80	0.00	4.80	0.073	0.000	0.073	0.055	0.018	3.228
MACKLIN	SPARKY SAND	9.247	5.80	0.00	5.80	0.536	0.000	0.536	0.323	0.213	26.218
MAIDSTONE	MCLAREN SAND	6.320	9.20	0.00	9.20	0.581	0.000	0.581	0.133	0.448	33.015
	WASECA SAND	0.913	8.70	0.00	8.70	0.079	0.000	0.079	0.027	0.052	8.038
MANITO LAKE	SPARKY SAND	5.075	10.6	0.00	10.60	0.538	0.000	0.538	0.139	0.399	48.789
MARSDEN	SPARKY SAND	1.373	9.10	0.00	9.10	0.125	0.000	0.125	0.103	0.022	6.108
MARSDEN SOUTH	SPARKY SAND (VOL UNIT NO. 1)	10.830	4.60	2.00	6.60	0.498	0.217	0.715	0.287	0.428	49.674
	SPARKY SAND (NON-UNIT)	2.486	6.20	0.00	6.20	0.154	0.000	0.154	0.051	0.103	20.294
NEILBURG	MCLAREN SAND	5.939	14.80	0.00	14.80	0.879	0.000	0.879	0.287	0.592	76.883
NORTHMINSTER	SPARKY SAND (NORTH. SPARKY VOL UNIT)	10.939	3.60	4.00	7.60	0.394	0.438	0.831	0.750	0.081	19.017
	SPARKY SAND (NON-UNIT)	6.070	2.20	0.30	2.50	0.134	0.018	0.152	0.091	0.061	12.804

AREA I - HEAVY

OIL IN PLACE M3/M3	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	WATER SATURATION CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M3	AVERAGE DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL	PRODUCING HORIZON
0.299	4047	4.42	35.0	13.0	1.017	968	535	CRETACEOUS	1956	ABERFELDY	SPARKY SAND (UNIT)
0.299	1522	5.18	35.0	13.0	1.017	--	--	CRETACEOUS	--		SPARKY SAND (S. ABFDY SPKY VOL UNIT)
0.299	686	5.58	35.0	13.0	1.017	--	--	CRETACEOUS	--		SPARKY SAND (NON-UNIT)
0.158	227	4.50	25.0	30.0	1.111	970	599	CRETACEOUS	1969	BALDWINTON	SPARKY SAND
0.300	1101	2.99	36.0	15.3	1.018	965	496	CRETACEOUS	1962	BIG GULLY	MCLAREN SAND (VOLUNTARY UNIT NO. 1)
0.300	308	2.50	36.0	15.3	1.018	965	479	CRETACEOUS	1962		WASECA SAND (VOLUNTARY UNIT NO. 1)
0.300	65	3.50	36.0	15.3	1.018	981	496	CRETACEOUS	--		MCLAREN SAND (NON-UNIT)
0.300	16	7.32	36.0	15.3	1.018	972	479	CRETACEOUS	--		WASECA SAND (NON-UNIT)
0.158	664	4.53	25.0	30.0	1.111	971	579	CRETACEOUS	1978	BUZZARD	LLOYDMINSTER SAND
0.234	1354	6.80	35.0	31.0	1.030	969	477	CRETACEOUS	1968	CELTIC	G.P. SAND
0.264	1429	5.50	35.0	24.0	1.008	975	463	CRETACEOUS	1968		SPARKY SAND
0.264	2694	7.30	35.0	24.0	1.008	968	451	CRETACEOUS	1968		WASECA SAND
0.000	0	0.00	0.0	0.0	1.008	--	--	CRETACEOUS	--		MANNVILLE SANDS (COMMINGLED)
0.290	1246	4.98	35.0	16.0	1.015	976	460	CRETACEOUS	1967	DEE VALLEY	WASECA SAND
0.290	351	4.44	35.0	16.0	1.015	969	490	CRETACEOUS	1968	DEE VALLEY EAST	SPARKY SAND
0.290	410	3.73	35.0	16.0	1.015	971	464	CRETACEOUS	1970		WASECA SAND
0.259	1906	3.11	34.0	15.0	1.116	962	556	CRETACEOUS	1948	DULWICH	SPARKY SAND
0.300	97	3.96	35.0	13.0	1.016	957	551	CRETACEOUS	1954	DULWICH NORTH	SPARKY SAND (N. DULWICH VOL UNIT)
0.300	4	2.74	35.0	13.0	1.016	--	--	CRETACEOUS	--		SPARKY SAND (NON-UNIT)
0.158	652	6.10	25.0	30.0	1.111	988	431	CRETACEOUS	1972	EDAM	WASECA SAND
0.203	1427	8.09	30.0	25.0	1.111	973	467	CRETACEOUS	1982	EDAM WEST	SPARKY/G.P. SANDS
0.203	1072	4.67	30.0	25.0	1.111	978	447	CRETACEOUS	--		WASECA SAND
0.000	0	0.00	0.0	0.0	1.111	968	--	CRETACEOUS	--		MANNVILLE SANDS
0.281	1473	1.04	35.0	18.0	1.020	962	583	CRETACEOUS	1951	EPPING	G.P. SAND (S. EPPING UNIT)
0.281	1651	5.15	35.0	18.0	1.020	964	563	CRETACEOUS	1951		SPARKY SAND (S. EPPING UNIT)
0.281	923	4.15	35.0	18.0	1.020	--	--	CRETACEOUS	--		SPARKY SAND (SW EPPING VOL UNIT 1)
0.281	1270	3.60	35.0	18.0	1.020	962	--	CRETACEOUS	--		G.P. SAND (NON-UNIT)
0.281	2671	4.60	35.0	18.0	1.020	968	--	CRETACEOUS	--		SPARKY SAND (NON-UNIT)
0.277	376	9.82	34.0	16.0	1.031	970	746	CRETACEOUS	1971	EYEHILL	CUMMINGS SAND
0.290	649	4.40	35.0	16.0	1.015	982	526	CRETACEOUS	1961	FOREST BANK	SPARKY SAND
0.290	666	3.25	35.0	16.0	1.015	979	507	CRETACEOUS	1963		WASECA SAND
0.172	81	3.80	25.0	30.0	1.015	--	--	CRETACEOUS	--		MANNVILLE SANDS (COMMINGLED)
0.266	259	3.44	35.0	20.0	1.053	963	636	CRETACEOUS	1976	FREEMONT	SPARKY SAND
0.266	346	3.65	35.0	20.0	1.053	958	620	CRETACEOUS	1976		WASECA SAND
0.284	421	5.75	34.0	15.0	1.017	967	566	CRETACEOUS	1970	FURNESS	SPARKY SAND
0.278	890	3.75	35.0	20.0	1.009	977	506	CRETACEOUS	1964	GOLDEN LAKE NORTH	SPARKY SAND (GOLDEN LAKE VOL UNIT)
0.290	1198	4.11	35.0	16.0	1.015	964	481	CRETACEOUS	1964		WASECA SAND (GOLDEN LAKE VOL UNIT)
0.278	532	4.50	35.0	20.0	1.009	970	--	CRETACEOUS	--		SPARKY SAND (NON-UNIT)
0.290	435	4.00	35.0	16.0	1.015	963	--	CRETACEOUS	--		WASECA SAND (NON-UNIT)
0.284	1463	6.40	35.0	18.0	1.012	978	490	CRETACEOUS	1964	GOLDEN LAKE SOUTH	SPARKY SAND
0.290	1733	3.88	35.0	16.0	1.015	966	473	CRETACEOUS	1964		WASECA SAND
0.290	874	4.33	35.7	16.0	1.033	963	472	CRETACEOUS	1949	GULLY LAKE	WASECA SAND (VOLUNTARY UNIT NO. 1)
0.290	948	4.60	35.7	16.0	1.033	969	--	CRETACEOUS	--		WASECA SAND (NON-UNIT)
0.228	202	6.19	30.0	20.0	1.053	981	513	CRETACEOUS	1950	LANDROSE	MCLAREN SAND
0.290	168	4.55	36.0	18.0	1.017	983	521	CRETACEOUS	1930		WASECA SAND
0.230	1263	6.22	30.0	21.0	1.031	962	518	CRETACEOUS	1960	LASHBURN	WASECA SAND (LASH. WASECA VOL UNIT)
0.293	291	5.45	35.0	15.0	1.017	963	--	CRETACEOUS	--		WASECA SAND (NON-UNIT)
0.275	113	3.41	35.0	20.0	1.017	983	534	CRETACEOUS	1967	LASHBURN SOUTH	SPARKY SAND
0.293	550	4.81	35.0	15.0	1.017	979	524	CRETACEOUS	1971		WASECA SAND
0.158	626	6.00	25.0	30.0	1.111	991	537	CRETACEOUS	1979	LASHBURN WEST	SPARKY SAND
0.299	130	6.20	35.0	13.0	1.017	965	556	CRETACEOUS	1952	LLOYDMINSTER	SPARKY SAND
0.266	614	5.49	33.0	15.0	1.053	960	572	CRETACEOUS	1947	LONE ROCK	SPARKY SAND
0.248	134	4.60	36.0	30.0	1.017	971	509	CRETACEOUS	1950	LOW LAKE	WASECA SAND
0.261	1248	2.84	35.0	23.0	1.033	947	712	CRETACEOUS	1976	MACKLIN	SPARKY SAND
0.158	1486	2.70	25.0	30.0	1.111	963	500	CRETACEOUS	1978	MAIDSTONE	MCLAREN SAND
0.158	223	2.60	25.0	30.0	1.111	973	503	CRETACEOUS	1981		WASECA SAND
0.158	716	4.50	25.0	30.0	1.111	965	605	CRETACEOUS	1970	MANITO LAKE	SPARKY SAND
0.266	113	4.57	35.0	20.0	1.053	982	606	CRETACEOUS	1949	MARSDEN	SPARKY SAND
0.218	518	9.58	30.0	25.0	1.031	946	625	CRETACEOUS	1979	MARSDEN SOUTH	SPARKY SAND (VOL UNIT NO. 1)
0.218	178	6.40	30.0	25.0	1.031	946	625	CRETACEOUS	--		SPARKY SAND (NON-UNIT)
0.158	1146	3.29	25.0	30.0	1.111	964	570	CRETACEOUS	1978	NEILBURG	MCLAREN SAND
0.284	987	3.90	34.0	15.0	1.017	976	541	CRETACEOUS	1959	NORTHMINSTER	SPARKY SAND (NORTH. SPARKY VOL UNIT)
0.284	356	6.00	34.0	15.0	1.017	967	--	CRETACEOUS	--		SPARKY SAND (NON-UNIT)

POOL	PRODUCING HORIZON	ORIGINAL OIL IN PLACE MILLION M3	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMMULATIVE PRODUCTION DEC 31/85	REMAINING RESERVES	1985 PROD. 1000 M3
			PER CENT			MILLION CUBIC METRES					
NORTHMINSTER NORTH	G.P. SAND	0.456	2.60	0.00	2.60	0.012	0.000	0.012	0.011	0.001	0.511
	SPARKY SAND	4.205	4.60	0.00	4.60	0.193	0.000	0.193	0.065	0.128	7.889
PIKES PEAK	G.P. SAND	1.866	15.90	0.00	15.90	0.297	0.000	0.297	0.178	0.119	17.954
	SPARKY SAND	0.628	1.90	0.00	1.90	0.012	0.000	0.012	0.009	0.003	1.184
	WASECA SAND	9.253	3.00	15.20	18.20	0.278	1.407	1.684	0.866	0.818	265.602
RUSH LAKE	SPARKY SAND	3.977	3.30	0.00	3.30	0.131	0.000	0.131	0.056	0.075	15.399
	WASECA SAND	2.211	3.80	0.00	3.80	0.084	0.000	0.084	0.031	0.053	9.331
SALT LAKE	LLOYDMINSTER SAND	4.911	19.40	0.00	19.40	0.953	0.000	0.953	0.061	0.892	60.064
SENLAC	LLOYDMINSTER SAND	13.380	7.50	0.00	7.50	1.003	0.000	1.003	0.370	0.633	88.974
SILVERDALE	SPARKY SAND	19.684	6.20	0.80	7.00	1.220	0.157	1.378	1.248	0.130	26.850
STANDARD HILL	WASECA SAND	19.532	10.30	0.00	10.30	2.012	0.000	2.012	0.899	1.113	98.643
TANGLEFLAGS	LLOYDMINISTER SAND (VOL UNIT NO.2)	4.001	6.30	2.70	9.00	0.252	0.108	0.360	0.222	0.138	18.634
	G.P. (VOL UNIT NO. 3)	4.857	5.50	0.00	5.50	0.267	0.000	0.267	0.113	0.154	19.236
	LLOYDMINSTER SD (VOL UNIT NO. 3)	5.743	5.10	0.00	5.10	0.293	0.000	0.293	0.169	0.124	19.621
	MCLAREN SAND (VOL UNIT NO. 3)	0.212	5.70	0.00	5.70	0.012	0.000	0.012	0.007	0.005	0.777
	SPARKY SAND (VOL UNIT NO. 3)	4.857	1.20	0.00	1.20	0.058	0.000	0.058	0.024	0.034	3.752
	G.P. SAND (NON-UNIT)	44.740	6.70	0.70	7.40	2.998	0.313	3.311	1.228	3.733	110.362
	LLOYDMINSTER SAND (NON-UNIT)	45.523	4.30	0.00	4.30	1.957	0.000	1.957	0.766		76.246
	MCLAREN SAND (NON-UNIT)	2.611	3.90	0.00	3.90	0.102	0.000	0.102	0.053		6.317
	SPARKY SAND (NON-UNIT)	12.266	7.10	0.00	7.10	0.871	0.000	0.871	0.204		28.043
	MANNVILLE SD (COMMINGLED) (NON-UNIT)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.257		19.058
TANGLEFLAGS EAST	MCLAREN SAND	1.422	7.60	0.00	7.60	0.108	0.000	0.108	0.053	0.055	7.536
TANGLEFLAGS NORTH	CUMMINGS SAND	3.636	3.70	0.00	3.70	0.135	0.000	0.135	0.063	0.072	7.115
	G.P. SAND	1.446	1.30	0.00	1.30	0.019	0.000	0.019	0.010	0.009	1.896
	LLOYDMINSTER SAND	13.195	4.20	0.00	4.20	0.554	0.000	0.554	0.200	0.354	37.462
TANGLEFLAGS WEST	G.P. SAND	1.387	1.30	0.00	1.30	0.018	0.000	0.018	0.009	0.009	1.261
	LLOYDMINSTER SAND	3.674	4.00	0.00	4.00	0.147	0.000	0.147	0.068	0.079	10.134
	SPARKY SAND	1.892	4.80	0.00	4.80	0.091	0.000	0.091	0.044	0.047	6.056
WESTHAZEL	G.P.SAND	6.031	4.10	0.00	4.10	0.247	0.000	0.247	0.055	0.192	21.275
	SPARKY SAND	5.478	4.60	0.00	4.60	0.252	0.000	0.252	0.097	0.155	20.280
WINTER	CUMMINGS SAND	4.242	0.84	0.00	0.84	0.036	0.000	0.036	0.022	0.014	3.139
MISCELLANEOUS	BASAL MANNVILLE SAND	0.028	2.00	0.00	2.00	0.001	0.000	0.001	0.001	0.000	0.000
	COLONY SAND	7.150	2.40	0.00	2.40	0.172	0.000	0.172	0.038	0.134	11.366
	CUMMINGS SAND	8.701	1.20	0.00	1.20	0.104	0.000	0.104	0.051	0.053	6.408
	DINA SAND	1.979	0.70	0.00	0.70	0.014	0.000	0.014	0.004	0.010	0.895
	G.P. SAND	21.062	2.80	0.00	2.80	0.590	0.000	0.590	0.297	0.293	36.946
	LLOYDMINSTER SAND	10.064	1.80	2.00	3.80	0.181	0.201	0.382	0.236	0.146	54.284
	MANNVILLE SANDS	0.287	2.80	0.00	2.80	0.008	0.000	0.008	0.004	0.004	0.657
	MANNVILLE SANDS (COMMINGLED)	17.612	2.10	0.00	2.10	0.370	0.000	0.370	0.187	0.183	22.220
	MCLAREN SAND	11.150	3.20	0.00	3.20	0.357	0.000	0.357	0.161	0.196	23.854
	REX SAND	3.363	1.40	0.00	1.40	0.047	0.000	0.047	0.027	0.020	2.398
	SPARKY SAND	34.060	4.60	0.00	4.60	1.567	0.000	1.567	0.672	0.895	107.994
	WASECA SAND	17.772	2.90	0.00	2.90	0.515	0.000	0.515	0.246	0.269	43.500
	TOTAL AREA I HEAVY	1010.008				54.296	10.775	65.070	36.996	28.074	3062.767
AREA II - HEAVY											
ALSASK	BASAL MANNVILLE SAND	0.162	10.50	0.00	10.50	0.017	0.000	0.017	0.010	0.007	1.170
BUFFALO COULEE	BAKKEN SAND	7.946	2.00	6.80	8.80	0.159	0.540	0.699	0.254	0.445	20.300
BUFFALO COULEE NORTH	BAKKEN SAND	3.508	2.10	0.00	2.10	0.074	0.000	0.074	0.061	0.013	5.400
CACTUS LAKE	BASAL MANNVILLE-BAKKEN SAND	28.920	5.90	0.00	5.90	1.706	0.000	1.706	1.079	0.627	200.310
COLEVILLE	BAKKEN SAND	54.093	3.90	14.00	17.90	2.110	7.573	9.683	6.562	3.121	174.880
	MANNVILLE SANDS	1.517	5.00	0.00	5.00	0.076	0.000	0.076	0.044	0.032	4.110
COLEVILLE SOUTH	BAKKEN SANDS	8.135	6.60	0.00	6.60	0.537	0.000	0.537	0.062	0.475	34.520
	MANNVILLE	1.810	7.30	0.00	7.30	0.132	0.000	0.132	0.010	0.122	4.790
COSINE LAKE	LLOYDMINSTER SAND	7.487	0.70	0.00	0.70	0.052	0.000	0.052	0.035	0.017	6.590
COURT	BAKKEN SAND	11.741	5.40	0.00	5.40	0.634	0.000	0.634	0.146	0.488	61.020
DRUID	MANNVILLE SANDS	1.946	2.90	0.00	2.90	0.056	0.000	0.056	0.016	0.040	3.220
FUSILIER	BAKKEN SAND	3.239	11.10	0.00	11.10	0.360	0.000	0.360	0.164	0.196	16.570
HEARTS HILL	BAKKEN SAND	2.632	5.10	0.00	5.10	0.134	0.000	0.134	0.025	0.109	15.360
HOOSIER	BAKKEN SAND (VOLUNTARY UNIT NO. 1)	3.128	4.00	4.30	8.30	0.125	0.135	0.260	0.140	0.120	12.240
	BAKKEN SAND (NON-UNIT)	5.178	5.50	0.00	5.50	0.285	0.000	0.285	0.150	0.135	15.670
LOVERNA	DETRITAL	2.766	4.10	0.00	4.10	0.113	0.000	0.113	0.078	0.035	3.340
LUSELAND	BAKKEN SAND	14.504	4.20	0.00	4.20	0.609	0.000	0.609	0.108	0.501	34.000

OIL IN PLACE M3/M3	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	WATER SATURATION CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M3	AVERAGE DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL	PRODUCING HORIZON
0.158	59	4.91	25.0	30.0	1.111	984	543	CRETACEOUS	1961	NORTHMINSTER NORTH	G.P. SAND
0.158	568	4.70	25.0	30.0	1.111	970	524	CRETACEOUS	1961		SPARKY SAND
0.233	191	4.20	35.0	30.0	1.053	970	530	CRETACEOUS	1970	PIKES PEAK	G.P. SAND
0.233	90	3.00	35.0	30.0	1.053	984	515	CRETACEOUS	1973		SPARKY SAND
0.275	437	7.70	33.0	15.0	1.020	978	497	CRETACEOUS	1970		WASECA SAND
0.158	502	5.03	25.0	30.0	1.111	978	478	CRETACEOUS	1971	RUSH LAKE	SPARKY SAND
0.158	283	4.96	25.0	30.0	1.111	977	450	CRETACEOUS	1971		WASECA SAND
0.158	720	4.33	25.0	30.0	1.111	--	737	CRETACEOUS	1985	SALT LAKE	LLOYDMINSTER SAND
0.203	1332	4.96	30.0	25.0	1.111	968	787	CRETACEOUS	1980	SENLAC	LLOYDMINSTER SAND
0.258	2016	3.78	34.0	20.0	1.053	965	564	CRETACEOUS	1968	SILVERDALE	SPARKY SAND
0.281	1939	3.58	34.0	16.0	1.015	968	472	CRETACEOUS	1963	STANDARD HILL	WASECA SAND
0.232	421	4.09	30.0	21.0	1.020	959	532	CRETACEOUS	1965	TANGLEFLAGS	LLOYDMINISTER SAND (VOL UNIT NO.2)
0.268	567	3.20	33.3	18.0	1.020	969	490	CRETACEOUS	1971		G.P. (VOL UNIT NO. 3)
0.205	833	3.36	30.6	31.6	1.020	960	532	CRETACEOUS	--		LLOYDMINSTER SD (VOL UNIT NO. 3)
0.233	32	2.85	35.0	30.0	1.053	--	455	CRETACEOUS	--		MCLAREN SAND (VOL UNIT NO. 3)
0.238	627	3.25	35.0	30.0	1.028	970	511	CRETACEOUS	1969		SPARKY SAND (VOL UNIT NO. 3)
0.268	3154	5.30	35.0	22.0	1.020	970	492	CRETACEOUS	--		G.P. SAND (NON-UNIT)
0.257	4655	3.80	35.0	25.0	1.020	962	--	CRETACEOUS	--		LLOYDMINSTER SAND (NON-UNIT)
0.233	340	3.30	35.0	30.0	1.053	--	473	CRETACEOUS	--		MCLAREN SAND (NON-UNIT)
0.238	1391	3.70	35.0	30.0	1.028	969	511	CRETACEOUS	--		SPARKY SAND (NON-UNIT)
0.000	0	0.00	0.0	0.0	1.020	964	--	CRETACEOUS	--		MANNVILLE SD (COMMINGLED) (NON-UNIT)
0.158	210	4.30	25.0	30.0	1.111	973	359	CRETACEOUS	1978	TANGLEFLAGS EAST	MCLAREN SAND
0.240	174	8.70	35.0	30.0	1.020	977	518	CRETACEOUS	1976	TANGLEFLAGS NORTH	CUMMINGS SAND
0.233	113	5.50	35.0	30.0	1.053	978	450	CRETACEOUS	1977		G.P. SAND
0.233	834	6.80	35.0	30.0	1.053	970	515	CRETACEOUS	1977		LLOYDMINSTER SAND
0.268	81	6.40	35.0	22.0	1.020	979	516	CRETACEOUS	1972	TANGLEFLAGS WEST	G.P. SAND
0.257	332	4.30	35.0	25.0	1.020	967	563	CRETACEOUS	1972		LLOYDMINSTER SAND
0.238	162	4.90	35.0	30.0	1.028	975	498	CRETACEOUS	1972		SPARKY SAND
0.233	324	8.00	35.0	30.0	1.053	977	485	CRETACEOUS	1971	WESTHAZEL	G.P. SAND
0.221	421	5.90	35.0	30.0	1.111	967	455	CRETACEOUS	1969		SPARKY SAND
0.158	217	12.41	25.0	30.0	1.111	980	660	CRETACEOUS	1980	WINTER	CUMMINGS SAND
0.233	8	1.52	35.0	30.0	1.053	--	--	CRETACEOUS	--	MISCELLANEOUS	BASAL MANNVILLE SAND
0.233	591	5.20	35.0	30.0	1.053	--	--	CRETACEOUS	--		COLONY SAND
0.233	542	6.90	35.0	30.0	1.053	--	--	CRETACEOUS	--		CUMMINGS SAND
0.233	105	8.10	35.0	30.0	1.053	--	--	CRETACEOUS	--		DINA SAND
0.233	1708	5.30	35.0	30.0	1.053	--	--	CRETACEOUS	--		G.P. SAND
0.233	801	5.40	35.0	30.0	1.053	--	--	CRETACEOUS	--		LLOYDMINSTER SAND
0.158	32	5.70	25.0	30.0	1.111	--	--	CRETACEOUS	--		MANNVILLE SANDS
0.233	996	7.60	35.0	30.0	1.053	--	--	CRETACEOUS	--		MANNVILLE SANDS (COMMINGLED)
0.233	1141	4.20	35.0	30.0	1.053	--	--	CRETACEOUS	--		MCLAREN SAND
0.233	219	6.60	35.0	30.0	1.053	--	--	CRETACEOUS	--		REX SAND
0.233	3327	4.40	35.0	30.0	1.053	--	--	CRETACEOUS	--		SPARKY SAND
0.233	1364	5.60	35.0	30.0	1.053	--	--	CRETACEOUS	--		WASECA SAND
											TOTAL AREA I HEAVY
											AREA II - HEAVY
0.091	45	3.96	26.9	55.0	1.333	953	818	CRETACEOUS	1968	ALSASK	BASAL MANNVILLE SAND
0.190	615	6.80	26.6	25.0	1.050	978	823	MISSISSIPPIAN	1952	BUFFALO COULEE	BAKKEN SAND
0.206	259	6.58	29.5	25.0	1.075	981	814	MISSISSIPPIAN	1952	BUFFALO COULEE NORTH	BAKKEN SAND
0.187	2007	7.70	30.0	35.0	1.042	964	851	MISSISSIPPIAN	1974	CACTUS LAKE	BASAL MANNVILLE-BAKKEN SAND
0.154	2759	12.71	24.1	31.0	1.078	982	823	MISSISSIPPIAN	1951	COLEVILLE	BAKKEN SAND
0.169	227	3.96	25.0	25.0	1.111	976	765	CRETACEOUS	1952		MANNVILLE SANDS
0.206	470	8.41	29.5	25.0	1.075	972	818	MISSISSIPPIAN	1983	COLEVILLE SOUTH	BAKKEN SANDS
0.169	113	9.49	25.0	25.0	1.111	974	757	CRETACEOUS	1983		MANNVILLE
0.183	871	4.70	29.0	30.0	1.110	965	776	CRETACEOUS	1972	COSINE LAKE	LLOYDMINSTER SAND
0.228	599	8.60	32.0	25.0	1.053	953	863	MISSISSIPPIAN	1982	COURT	BAKKEN SAND
0.163	178	6.70	25.9	30.0	1.111	969	729	CRETACEOUS	1969	DRUID	MANNVILLE SANDS
0.186	414	4.21	25.4	22.0	1.066	962	799	MISSISSIPPIAN	1955	FUSILIER	BAKKEN SAND
0.202	245	5.31	28.4	25.0	1.053	953	758	MISSISSIPPIAN	1983	HEARTS HILL	BAKKEN SAND
0.233	228	5.88	31.5	22.0	1.053	975	865	MISSISSIPPIAN	1973	HOOSIER	BAKKEN SAND (VOLUNTARY UNIT NO. 1)
0.185	389	7.19	25.3	22.0	1.066	976	--	MISSISSIPPIAN	--		BAKKEN SAND (NON-UNIT)
0.163	162	10.50	28.9	25.0	1.333	957	853	CRET-JURASSIC	1952	LOVERNA	DETRITAL
0.218	599	11.11	30.6	25.0	1.053	983	739	MISSISSIPPIAN	1979	LUSELAND	BAKKEN SAND

POOL	PRODUCING HORIZON	ORIGINAL OIL IN PLACE MILLION M3	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PRODUCTION DEC 31/85	REMAINING RESERVES	1985 PROD. 1000 M3
			--------	PER CENT	-------	-------------	MILLION CUBIC	METRES	-------------		
NORTH HOOSIER	BAKKEN SAND (VOLUNTARY UNIT)	8.617	2.30	11.50	13.80	0.198	0.991	1.189	0.842	0.347	30.700
	BAKKEN SAND (NON-UNIT)	4.035	5.70	0.00	5.70	0.230	0.000	0.230	0.157	0.073	10.850
NORTH HOOSIER	BASAL MANNVILLE SAND (VOL UNIT)	4.147	6.00	13.90	19.90	0.249	0.576	0.825	0.570	0.255	25.620
NORTH SMILEY	BAKKEN SAND	0.897	6.40	0.00	6.40	0.057	0.000	0.057	0.013	0.044	4.660
PLOVER LAKE	BAKKEN SAND	11.826	3.00	0.00	3.00	0.355	0.000	0.355	0.152	0.203	27.900
MISCELLANEOUS	BAKKEN SAND	13.745	3.40	0.00	3.40	0.467	0.000	0.467	0.105	0.362	26.400
	BASAL MANNVILLE SAND	1.550	2.60	0.00	2.60	0.040	0.000	0.040	0.015	0.025	3.800
	BIRDBEAR	0.098	8.90	0.00	8.90	0.009	0.000	0.009	0.002	0.007	1.800
	DETRITAL	3.983	2.20	0.00	2.20	0.088	0.000	0.088	0.022	0.066	6.500
	LLOYDMINISTER SAND	0.282	3.90	0.00	3.90	0.011	0.000	0.011	0.004	0.007	0.900
	MANNVILLE SAND	9.699	3.90	0.00	3.90	0.378	0.000	0.378	0.071	0.307	17.800
	TOTAL AREA II HEAVY	217.592				9.262	9.815	19.077	10.897	8.180	770.420
AREA II - LIGHT											
AVON HILL	VIKING (VOL UNIT)	4.493	5.50	0.00	5.50	0.247	0.000	0.247	0.150	0.097	22.792
	VIKING (NON-UNIT)	6.603	6.50	0.00	6.50	0.429	0.000	0.429	0.260	0.169	36.229
DODSLAND	VIKING SAND (EAGLE LAKE UNIT)	12.724	15.60	8.00	23.60	1.985	1.018	3.003	1.898	1.105	113.708
	VIKING SAND (EAST DODS. VOL UNIT)	24.431	5.00	0.00	5.00	1.222	0.000	1.222	0.751	0.471	63.764
	VIKING SAND (GLENEATH UNIT)	9.546	13.40	12.40	25.80	1.279	1.184	2.463	1.789	0.674	83.730
	VIKING SAND (GLENEATH S. VOL UNIT)	0.396	15.60	7.30	22.90	0.062	0.029	0.091	0.035	0.056	3.134
	VIKING SAND (KIYIU LAKE VOL UNIT)	2.323	6.50	0.00	6.50	0.151	0.000	0.151	0.037	0.114	18.507
	VIKING SAND (NORTH DODS. VOL UNIT)	7.253	4.60	18.20	22.80	0.334	1.320	1.654	0.148	1.506	43.628
	VIKING SAND (NON-UNIT)	49.544	6.90	0.10	7.00	3.419	0.050	3.468	1.982	1.486	300.379
EUREKA	VIKING (NORTH EUREKA UNIT)	6.709	10.00	6.70	16.70	0.671	0.450	1.120	1.056	0.064	13.436
	VIKING (SOUTH EUREKA UNIT)	6.811	9.50	9.50	19.00	0.647	0.647	1.294	1.093	0.201	25.226
	VIKING (NON-UNIT)	6.437	3.10	0.00	3.10	0.200	0.000	0.200	0.083	0.117	21.517
KERROBERT	VIKING	17.402	7.00	0.00	7.00	1.218	0.000	1.218	0.256	0.962	230.445
LUCKY HILLS	VIKING (VOLUNTARY UNIT)	1.573	5.00	0.00	5.00	0.079	0.000	0.079	0.066	0.013	2.850
	VIKING (NON-UNIT)	1.919	4.30	0.00	4.30	0.083	0.000	0.083	0.078	0.005	2.570
PLATO	VIKING (VOL UNIT NO. 1)	4.239	5.10	1.90	7.00	0.216	0.081	0.297	0.267	0.030	4.308
	VIKING (NON-UNIT)	0.885	2.70	0.00	2.70	0.024	0.000	0.024	0.016	0.008	3.232
PLATO NORTH	VIKING	6.933	7.70	0.00	7.70	0.534	0.000	0.534	0.117	0.417	48.498
SMILEY-DEWAR	VIKING	25.040	15.30	6.10	21.40	3.831	1.527	5.359	4.119	1.240	95.642
WHITESIDE	VIKING SAND (VOL UNIT)	2.668	10.00	0.00	10.00	0.267	0.000	0.267	0.240	0.027	11.566
	VIKING SAND (NON-UNIT)	1.174	4.10	0.00	4.10	0.048	0.000	0.048	0.021	0.027	7.522
MISCELLANEOUS	VIKING SAND	12.969	3.70	0.00	3.70	0.480	0.000	0.480	0.129	0.351	65.346
	VIKING CHERT	0.158	1.20	0.00	1.20	0.002	0.000	0.002	0.002	0.000	0.000
	TOTAL AREA II LIGHT	212.231				17.426	6.305	23.730	14.593	9.137	1218.029
AREA III - MEDIUM											
ANTELOPE LAKE	UPPER SHAUNAVON (VOL UNIT)	0.992	5.00	5.70	10.70	0.050	0.057	0.106	0.066	0.040	3.310
	UPPER SHAUNAVON (NON-UNIT)	0.029	5.20	0.00	5.20	0.002	0.000	0.002	0.002	.000	0.149
ANTELOPE LAKE EAST	ROSERAY SAND	0.186	3.80	1.10	4.90	0.007	0.002	0.009	0.007	0.002	0.633
BATTLE CREEK	MADISON	0.428	4.10	0.00	4.10	0.018	0.000	0.018	0.017	0.001	0.296
BATTLE CREEK	UPPER SHAUNAVON	0.497	8.10	0.00	8.10	0.040	0.000	0.040	0.029	0.011	1.304
BATTRUM NORTH	ROSERAY SAND	2.328	7.90	0.00	7.90	0.184	0.000	0.184	0.064	0.120	15.630
BATTRUM	ROSERAY SAND (UNIT NO. 1)	29.044	10.00	10.40	20.40	2.904	3.021	5.925	4.658	1.267	115.251
	ROSERAY SAND (UNIT NO. 2)	5.990	6.60	21.40	28.00	0.395	1.282	1.677	1.195	0.482	37.801
	ROSERAY SAND (UNIT NO. 3)	7.254	8.00	20.20	28.20	0.580	1.465	2.046	1.230	0.816	43.719
	ROSERAY SAND (UNIT NO. 4)	3.431	8.30	26.70	35.00	0.285	0.916	1.201	0.875	0.326	49.226
	ROSERAY SAND (NON-UNIT)	1.519	13.00	0.00	13.00	0.197	0.000	0.197	0.037	0.160	12.104
BENCH	UPPER SHAUNAVON	5.446	7.30	0.00	7.30	0.398	0.000	0.398	0.231	0.167	19.544
BEVERLEY	CANTUAR SAND	7.011	6.00	1.80	7.80	0.421	0.126	0.547	0.395	0.152	23.636
BEVERLEY NORTH	CANTUAR SAND	7.523	3.90	0.00	3.90	0.293	0.000	0.293	0.172	0.121	13.344
BEVERLEY	UPPER ROSERAY SAND (BEV. UNIT NO. 1)	4.036	15.00	27.50	42.50	0.605	1.110	1.715	1.548	0.167	22.024
	UPPER ROSERAY SAND (NON-UNIT)	0.567	14.70	0.00	14.70	0.083	0.000	0.083	0.053	0.030	5.135
BONE CREEK	UPPER SHAUNAVON (UNIT)	12.699	5.00	15.20	20.20	0.635	1.930	2.565	2.280	0.285	32.928
BUTTE	UPPER SHAUNAVON (VOLUNTARY UNIT)	8.916	5.50	10.60	16.10	0.490	0.945	1.436	0.737	0.699	33.955
	UPPER SHAUNAVON (NON-UNIT)	0.727	4.60	0.00	4.60	0.033	0.000	0.033	0.008	0.025	6.363
CANTUAR EAST	CANTUAR SAND (UNIT NO. 1)	4.814	3.10	2.70	5.80	0.149	0.130	0.279	0.164	0.115	10.088
	CANTUAR SAND (UNIT NO. 2)	0.813	1.60	0.00	1.60	0.013	0.000	0.013	0.011	0.002	0.340

OIL IN PLACE M3/M3	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	WATER SATURATION CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M3	AVERAGE DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL	PRODUCING HORIZON
0.223	558	6.92	30.5	22.0	1.066	958	878	MISSISSIPPIAN	1965	NORTH HOOSIER	BAKKEN SAND (VOLUNTARY UNIT)
0.223	259	6.98	30.5	22.0	1.066	--	--	MISSISSIPPIAN	--		BAKKEN SAND (NON-UNIT)
0.195	313	6.80	28.0	27.0	1.049	970	838	CRETACEOUS	1964	NORTH HOOSIER	BASAL MANNVILLE SAND (VOL UNIT)
0.175	97	5.28	25.1	25.0	1.075	985	810	MISSISSIPPIAN	1981	NORTH SMILEY	BAKKEN SAND
0.224	599	8.80	31.5	25.0	1.053	987	817	MISSISSIPPIAN	1974	PLOVER LAKE	BAKKEN SAND
0.193	995	7.14	27.5	25.0	1.066	--	--	MISSISSIPPIAN	--	MISCELLANEOUS	BAKKEN SAND
0.194	146	5.46	27.3	25.0	1.053	--	--	CRETACEOUS	--		BASAL MANNVILLE SAND
0.056	32	5.50	12.4	40.0	1.333	975	--	DEVONIAN	--		BIRDBEAR
0.142	308	9.10	27.1	30.0	1.335	--	--	CRET.-JURASSIC	--		DETRITAL
0.166	32	5.30	25.0	30.0	1.053	--	--	CRETACEOUS	--		LLOYDMINISTER SAND
0.185	603	8.70	26.5	25.0	1.075	--	--	CRETACEOUS	--		MANNVILLE SAND
											TOTAL AREA II HEAVY
											AREA II - LIGHT
0.115	1586	2.47	23.0	45.0	1.103	844	725	CRETACEOUS	1959	AVON HILL	VIKING (VOL UNIT)
0.115	2331	2.47	23.0	45.0	1.103	844	725	CRETACEOUS	1959		VIKING (NON-UNIT)
0.112	3772	3.02	22.4	45.0	1.103	840	671	CRETACEOUS	1956	DODSLAND	VIKING SAND (EAGLE LAKE UNIT)
0.112	6814	3.21	22.4	45.0	1.100	840	671	CRETACEOUS	1956		VIKING SAND (EAST DODS. VOL UNIT)
0.108	3011	2.93	21.7	45.0	1.103	840	671	CRETACEOUS	1956		VIKING SAND (GLENEATH UNIT)
0.112	129	2.75	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING SAND (GLENEATH S. VOL UNIT)
0.112	842	2.47	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING SAND (KIYIU LAKE VOL UNIT)
0.112	1910	3.40	22.4	45.0	1.100	840	671	CRETACEOUS	1956		VIKING SAND (NORTH DODS. VOL UNIT)
0.112	18179	2.44	22.4	45.0	1.103	842	671	CRETACEOUS	1956		VIKING SAND (NON-UNIT)
0.120	1683	3.32	23.0	42.0	1.111	853	724	CRETACEOUS	1954	EUREKA	VIKING (NORTH EUREKA UNIT)
0.121	1522	3.69	23.0	42.0	1.100	--	724	CRETACEOUS	1954		VIKING (SOUTH EUREKA UNIT)
0.121	1279	4.15	23.0	42.0	1.100	849	724	CRETACEOUS	1954		VIKING (NON-UNIT)
0.115	8822	1.72	23.0	45.0	1.103	842	714	CRETACEOUS	1981	KERROBERT	VIKING
0.114	453	3.05	23.0	45.0	1.111	843	716	CRETACEOUS	1959	LUCKY HILLS	VIKING (VOLUNTARY UNIT)
0.114	615	2.74	23.0	45.0	1.111	843	716	CRETACEOUS	1959		VIKING (NON-UNIT)
0.128	1781	1.86	22.0	38.0	1.066	853	644	CRETACEOUS	1968	PLATO	VIKING (VOL UNIT NO. 1)
0.128	372	1.86	22.0	38.0	1.066	856	644	CRETACEOUS	1968		VIKING (NON-UNIT)
0.135	1959	2.63	23.0	35.0	1.111	865	705	CRETACEOUS	1978	PLATO NORTH	VIKING
0.121	4678	4.42	24.0	45.0	1.090	875	701	CRETACEOUS	1953	SMILEY-DEWAR	VIKING
0.120	1214	1.83	24.0	45.0	1.099	870	751	CRETACEOUS	1953	WHITESIDE	VIKING SAND (VOL UNIT)
0.120	534	1.83	24.0	45.0	1.099	870	751	CRETACEOUS	1953		VIKING SAND (NON-UNIT)
0.135	4322	2.23	23.0	35.0	1.111	--	--	CRETACEOUS	--	MISCELLANEOUS	VIKING SAND
0.140	32	3.51	24.0	35.0	1.111	--	--	CRETACEOUS	--		VIKING CHERT
											TOTAL AREA II LIGHT
											AREA III - MEDIUM
0.105	442	2.13	18.0	40.0	1.025	914	1037	JURASSIC	1964	ANTELOPE LAKE	UPPER SHAUNAVON (VOL UNIT)
0.100	16	1.83	17.0	40.0	1.025	--	--	JURASSIC	--		UPPER SHAUNAVON (NON-UNIT)
0.138	32	4.20	23.5	37.0	1.070	923	950	JURASSIC	1964	ANTELOPE LAKE EAST	ROSERAY SAND
0.115	49	7.62	16.0	25.0	1.047	997	1390	MISSISSIPPIAN	1966	BATTLE CREEK	MADISON
0.084	129	4.57	12.5	25.0	1.111	945	1337	JURASSIC	1966	BATTLE CREEK	UPPER SHAUNAVON
0.141	218	7.58	24.5	41.0	1.026	937	866	JURASSIC	1979	BATTRUM NORTH	ROSERAY SAND
0.169	1599	10.73	26.0	33.2	1.026	938	884	JURASSIC	1955	BATTRUM	ROSERAY SAND (UNIT NO. 1)
0.190	324	9.75	27.4	29.0	1.026	--	--	JURASSIC	--		ROSERAY SAND (UNIT NO. 2)
0.149	842	5.79	25.1	39.3	1.024	--	--	JURASSIC	--		ROSERAY SAND (UNIT NO. 3)
0.149	453	5.09	25.1	39.3	1.024	--	--	JURASSIC	--		ROSERAY SAND (UNIT NO. 4)
0.148	162	6.34	25.0	39.3	1.026	--	--	JURASSIC	--		ROSERAY SAND (NON-UNIT)
0.128	1813	2.35	16.0	15.0	1.064	915	1347	JURASSIC	1969	BENCH	UPPER SHAUNAVON
0.113	1246	4.97	22.6	46.1	1.076	920	991	CRETACEOUS	1969	BEVERLEY	CANTUAR SAND
0.118	842	7.60	23.0	45.0	1.076	932	969	CRETACEOUS	1967	BEVERLEY NORTH	CANTUAR SAND
0.161	805	3.11	28.0	38.8	1.063	926	983	JURASSIC	1952	BEVERLEY	UPPER ROSERAY SAND (BEV. UNIT NO. 1)
0.161	113	3.11	28.0	38.8	1.063	929	--	JURASSIC	--		UPPER ROSERAY SAND (NON-UNIT)
0.123	2226	4.63	13.8	5.0	1.064	914	1341	JURASSIC	1954	BONE CREEK	UPPER SHAUNAVON (UNIT)
0.164	2137	2.54	22.8	25.0	1.041	914	1338	JURASSIC	1967	BUTTE	UPPER SHAUNAVON (VOLUNTARY UNIT)
0.164	388	1.14	22.8	25.0	1.041	--	--	JURASSIC	--		UPPER SHAUNAVON (NON-UNIT)
0.122	763	5.18	23.3	43.6	1.079	920	965	CRETACEOUS	1956	CANTUAR EAST	CANTUAR SAND (UNIT NO. 1)
0.122	146	4.57	23.3	43.6	1.079	929	--	CRETACEOUS	--		CANTUAR SAND (UNIT NO. 2)

POOL	PRODUCING HORIZON	ORIGINAL OIL IN PLACE MILLION M3	ESTIMATED RECOVERY			INITIAL RESERVES			CUMMULATIVE PRODUCTION DEC 31/85	REMAINING RESERVES	1985 PROD. 1000 M3
			PRIMARY	ENHANCED	TOTAL	PRIMARY	ENHANCED	TOTAL			
				PER CENT				MILLION CUBIC METRES			
CANTUAR EAST	ROSERAY SAND (UNIT NO. 1)	2.899	6.80	3.00	9.80	0.197	0.087	0.284	0.202	0.082	6.186
	ROSERAY SAND (UNIT NO. 2)	1.989	11.40	2.40	13.80	0.227	0.048	0.274	0.222	0.052	4.563
	ROSERAY SAND (NON-UNIT)	0.014	1.00	0.00	1.00	0.000	0.000	0.000	0.000	0.000	0.000
CANTUAR	LOWER ROSERAY SAND (CANTUAR UNIT)	13.927	13.80	0.00	13.80	1.922	0.000	1.922	1.532	0.390	54.674
	LOWER ROSERAY SAND (NON-UNIT)	0.032	0.50	0.00	0.50	0.000	0.000	0.000	0.000	0.000	0.000
CANTUAR MAIN	CANTUAR SAND (CANTUAR UNIT)	22.107	8.70	11.10	19.80	1.923	2.454	4.377	3.776	0.601	90.622
	CANTUAR SAND (NON-UNIT)	0.111	5.40	0.00	5.40	0.006	0.000	0.006	0.002	0.004	0.378
CLINTONVILLE	SHAUNAVON	3.051	2.60	0.00	2.60	0.079	0.000	0.079	0.055	0.024	1.978
COVINGTON	UPPER SHAUNAVON (COV. UNIT NO. 1)	1.071	14.00	5.90	19.90	0.150	0.063	0.213	0.210	0.003	2.989
COVINGTON WEST	UPPER SHAUNAVON	0.629	15.80	0.00	15.80	0.099	0.000	0.099	0.076	0.023	2.704
DELTA	UPPER SHAUNAVON (DELTA UNIT NO. 1)	9.383	12.00	13.80	25.80	1.126	1.295	2.421	2.166	0.255	36.683
	UPPER SHAUNAVON (DELTA UNIT NO. 2)	2.540	7.00	7.10	14.10	0.178	0.180	0.358	0.319	0.039	7.500
	UPPER SHAUNAVON (NON-UNIT)	0.936	11.50	0.00	11.50	0.108	0.000	0.108	0.081	0.027	2.758
DOLLARD	UPPER SHAUNAVON (UNIT)	26.064	20.00	30.70	50.70	5.213	8.002	13.215	12.545	0.670	140.594
	UPPER SHAUNAVON (E. DOLL. VOL UNIT)	1.648	20.00	22.00	42.00	0.330	0.363	0.692	0.565	0.127	23.854
	UPPER SHAUNAVON (NON-UNIT)	0.585	17.10	0.00	17.10	0.100	0.000	0.100	0.090	0.010	1.652
EASTBROOK	UPPER SHAUNAVON	1.425	4.60	0.00	4.60	0.066	0.000	0.066	0.035	0.031	3.172
EASTEND	SHAUNAVON	2.501	3.30	0.00	3.30	0.083	0.000	0.083	0.066	0.017	4.202
FOSTERTON	ROSERAY SAND (MAIN UNIT)	21.994	17.00	24.70	41.70	3.739	5.432	9.171	8.558	0.613	73.248
	ROSERAY SAND (N.W. UNIT)	1.978	11.00	18.20	29.20	0.218	0.360	0.578	0.541	0.037	8.386
	ROSERAY SAND (W. FOST. VOL UNIT)	1.220	11.00	28.80	39.80	0.134	0.351	0.486	0.443	0.043	6.600
GULL LAKE	BASAL CANTUAR SAND (VOL UNIT NO. 1)	1.906	4.80	15.60	20.40	0.091	0.297	0.389	0.258	0.131	14.793
	BASAL CANTUAR SAND (JOHNSTON UNIT)	1.030	6.50	9.10	15.60	0.067	0.094	0.161	0.133	0.028	2.731
	BASAL CANTUAR SAND (NON-UNIT)	0.474	7.40	0.00	7.40	0.035	0.000	0.035	0.030	0.005	0.000
GULL LAKE CENTRAL	UPPER SHAUNAVON (VOL UNIT NO. 1)	0.614	24.00	18.50	42.50	0.147	0.114	0.261	0.198	0.063	5.363
	UPPER SHAUNAVON (NON-UNIT)	0.907	18.10	0.00	18.10	0.164	0.000	0.164	0.118	0.046	9.615
GULL LAKE NORTH	UPPER SHAUNAVON (UNIT)	6.822	10.00	36.90	46.90	0.682	2.517	3.199	2.983	0.216	38.067
	UPPER SHAUNAVON (NON-UNIT)	0.272	14.00	0.00	14.00	0.038	0.000	0.038	0.032	0.006	1.186
GULL LAKE SOUTH	UPPER SHAUNAVON	1.501	12.20	0.00	12.20	0.183	0.000	0.183	0.123	0.060	3.892
HAZLET	ROSERAY SAND (UNIT)	1.742	24.80	0.00	24.80	0.432	0.000	0.432	0.392	0.040	5.358
	ROSERAY SAND (NON-UNIT)	0.063	0.50	0.00	0.50	0.000	0.000	0.000	0.000	0.000	0.000
ILLERBRUN	UPPER SHAUNAVON (VOLUNTARY UNIT)	3.399	16.60	14.60	31.20	0.564	0.496	1.060	0.919	0.141	19.532
	UPPER SHAUNAVON (NON-UNIT)	0.709	3.10	0.00	3.10	0.022	0.000	0.022	0.009	0.013	2.527
INSTOW	UPPER SHAUNAVON (SOUTH VOL UNIT)	1.807	15.4	0.00	15.40	0.278	0.000	0.278	0.060	0.218	26.188
	UPPER SHAUNAVON (UNIT)	24.473	9.00	26.30	35.30	2.203	6.436	8.639	7.308	1.331	122.279
	UPPER SHAUNAVON (NON-UNIT)	0.030	6.70	0.00	6.70	0.002	0.000	0.002	0.001	0.001	0.222
JAVA	CANTUAR SAND	1.304	5.30	0.00	5.30	0.069	0.000	0.069	0.034	0.035	3.438
JOHNSTON	UPPER SHAUNAVON (JOHNSTON UNIT)	0.201	18.40	0.00	18.40	0.037	0.000	0.037	0.034	0.003	0.486
LEITCHVILLE	SHAUNAVON (VOLUNTARY UNIT)	4.936	2.50	2.70	5.20	0.123	0.133	0.257	0.209	0.048	3.719
	SHAUNAVON (NON-UNIT)	2.592	6.80	0.00	6.80	0.176	0.000	0.176	0.080	0.096	17.548
LEON LAKE	SHAUNAVON	4.849	5.00	2.00	7.00	0.242	0.097	0.339	0.260	0.079	9.253
MAIN SUCCESS	ROSERAY SAND (MAIN UNIT)	6.858	13.00	26.10	39.10	0.892	1.790	2.682	2.557	0.125	22.147
NORTH PREMIER	ROSERAY SAND (UNIT NO. 1)	4.017	15.00	28.10	43.10	0.603	1.129	1.731	1.638	0.093	14.785
	ROSERAY SAND (UNIT NO. 4)	4.631	15.00	33.30	48.30	0.695	1.542	2.237	2.103	0.134	30.507
	ROSERAY SAND (NON-UNIT)	0.424	13.60	0.00	13.60	0.058	0.000	0.058	0.025	0.033	6.034
NORTH PREMIER	UPPER SHAUNAVON (UNIT NO. 1)	0.243	9.00	0.00	9.00	0.022	0.000	0.022	0.018	0.004	1.019
	UPPER SHAUNAVON (VOLUNTARY UNIT)	0.942	6.00	8.20	14.20	0.056	0.077	0.134	0.110	0.024	3.706
	UPPER SHAUNAVON (UNIT NO. 4)	2.569	10.00	2.80	12.80	0.257	0.072	0.329	0.273	0.056	8.064
	UPPER SHAUNAVON (NON-UNIT)	0.791	9.10	0.00	9.10	0.072	0.000	0.072	0.046	0.026	3.725
PENNANT	UPPER SHAUNAVON	0.701	13.10	0.00	13.10	0.092	0.000	0.092	0.074	0.018	3.837
RAPDAN	UPPER SHAUNAVON (UNIT)	16.558	6.10	13.10	19.20	1.010	2.169	3.179	2.479	0.700	67.197
	UPPER SHAUNAVON (N.RAPDAN VOL UNIT)	3.974	3.00	1.90	4.90	0.119	0.076	0.195	0.161	0.034	5.789
	UPPER SHAUNAVON (VOL UNIT NO. 2)	1.111	6.60	7.70	14.30	0.073	0.086	0.159	0.124	0.035	5.607
	UPPER SHAUNAVON (NON-UNIT)	0.626	1.90	0.00	1.90	0.012	0.000	0.012	0.006	0.006	1.559
RAPDAN WEST	SHAUNAVON	4.120	5.40	0.00	5.40	0.222	0.000	0.222	0.133	0.089	12.468
SOUTH SUCCESS	ROSERAY SAND (SOUTHWEST UNIT)	2.309	8.80	0.00	8.80	0.203	0.000	0.203	0.094	0.109	21.875
	ROSERAY SAND (SUCCESS UNIT)	8.563	13.20	33.20	46.40	1.130	2.843	3.973	3.341	0.632	53.181
SUCCESS ALPHA	ROSERAY SAND (ALPHA UNIT)	1.440	14.30	29.60	43.90	0.206	0.426	0.632	0.559	0.073	11.170
SUCCESS NORTH	ROSERAY SAND (VOLUNTARY UNIT)	2.098	14.00	11.00	25.00	0.294	0.231	0.524	0.098	0.426	24.908
SUFFIELD	ROSERAY SAND (UNIT NO.1)	1.878	15.00	50.00	65.00	0.282	0.939	1.221	1.071	0.150	27.890
	ROSERAY SAND (UNIT NO. 3)	2.780	13.00	35.80	48.80	0.361	0.995	1.356	1.120	0.236	43.954
	ROSERAY SAND (NON-UNIT)	0.107	1.00	0.00	1.00	0.001	0.000	0.001	0.000	0.001	0.000
SUFFIELD	UPPER SHAUNAVON (UNIT NO. 2)	3.222	7.00	17.50	24.50	0.226	0.564	0.789	0.604	0.185	17.965
	UPPER SHAUNAVON (UNIT NO. 3)	0.820	10.00	18.80	28.80	0.082	0.154	0.236	0.195	0.041	5.883
	UPPER SHAUNAVON (NON-UNIT)	0.511	8.50	0.00	8.50	0.043	0.000	0.043	0.043	0.000	0.692

OIL IN PLACE M3/M3	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	WATER SATURATION CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M3	AVERAGE DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL	PRODUCING HORIZON
0.145	716	2.80	26.0	40.0	1.079	933	983	JURASSIC	1952	CANTUAR EAST	ROSERAY SAND (UNIT NO. 1)
0.145	502	2.74	26.0	40.0	1.079	938	--	JURASSIC	--		ROSERAY SAND (UNIT NO. 2)
0.145	8	1.22	26.0	40.0	1.079	--	--	JURASSIC	--		ROSERAY SAND (NON-UNIT)
0.190	2765	2.65	27.2	24.6	1.079	964	991	JURASSIC	1952	CANTUAR	LOWER ROSERAY SAND (CANTUAR UNIT)
0.190	8	2.13	27.2	24.6	1.079	--	--	JURASSIC	--		LOWER ROSERAY SAND (NON-UNIT)
0.138	3166	5.06	26.4	43.6	1.079	922	975	CRETACEOUS	1952	CANTUAR MAIN	CANTUAR SAND (CANTUAR UNIT)
0.138	16	5.05	26.4	43.6	1.079	918	--	CRETACEOUS	--		CANTUAR SAND (NON-UNIT)
0.097	518	6.10	13.7	25.0	1.064	915	1362	JURASSIC	1953	CLINTONVILLE	SHAUNAVON
0.117	376	2.44	15.5	22.0	1.036	894	1330	JURASSIC	1966	COVINGTON	UPPER SHAUNAVON (COV. UNIT NO. 1)
0.066	194	4.88	11.8	25.0	1.333	906	1336	JURASSIC	1969	COVINGTON WEST	UPPER SHAUNAVON
0.136	2159	3.20	20.4	28.5	1.074	914	1065	JURASSIC	1956	DELTA	UPPER SHAUNAVON (DELTA UNIT NO. 1)
0.093	716	3.81	20.0	50.0	1.074	--	--	JURASSIC	--		UPPER SHAUNAVON (DELTA UNIT NO. 2)
0.099	259	3.66	21.2	50.0	1.074	--	--	JURASSIC	--		UPPER SHAUNAVON (NON-UNIT)
0.162	3642	4.42	20.0	12.0	1.087	914	1402	JURASSIC	1953	DOLLARD	UPPER SHAUNAVON (UNIT)
0.110	469	3.20	17.2	30.6	1.087	--	--	JURASSIC	--		UPPER SHAUNAVON (E. DOLL. VOL UNIT)
0.169	81	4.27	20.9	12.0	1.087	--	--	JURASSIC	--		UPPER SHAUNAVON (NON-UNIT)
0.102	259	5.40	14.6	25.0	1.075	926	1420	JURASSIC	1966	EASTBROOK	UPPER SHAUNAVON
0.088	583	4.87	12.1	20.0	1.099	927	1457	JURASSIC	1952	EASTEND	SHAUNAVON
0.222	1012	9.81	28.8	19.0	1.053	907	975	CRET.-JUR.	1952	FOSTERTON	ROSERAY SAND (MAIN UNIT)
0.225	104	8.44	28.8	19.0	1.035	933	--	CRET.-JUR.	--		ROSERAY SAND (N.W. UNIT)
0.166	146	5.03	25.0	30.0	1.053	--	--	CRET.-JUR.	--		ROSERAY SAND (W. FOST. VOL UNIT)
0.173	377	2.93	26.5	30.0	1.075	914	1100	CRETACEOUS	1953	GULL LAKE	BASAL CANTUAR SAND (VOL UNIT NO. 1)
0.119	132	6.58	21.1	39.5	1.076	--	--	CRETACEOUS	--		BASAL CANTUAR SAND (JOHNSTON UNIT)
0.118	61	6.58	21.0	39.5	1.076	927	--	CRETACEOUS	--		BASAL CANTUAR SAND (NON-UNIT)
0.084	453	1.62	16.9	46.5	1.080	914	1195	JURASSIC	1953	GULL LAKE CENTRAL	UPPER SHAUNAVON (VOL UNIT NO. 1)
0.084	645	1.68	16.9	46.5	1.080	907	--	JURASSIC	--		UPPER SHAUNAVON (NON-UNIT)
0.141	1230	3.93	19.4	25.0	1.031	964	1158	JURASSIC	1953	GULL LAKE NORTH	UPPER SHAUNAVON (UNIT)
0.141	49	3.93	19.4	25.0	1.031	920	--	JURASSIC	--		UPPER SHAUNAVON (NON-UNIT)
0.164	1027	0.89	24.7	30.0	1.053	891	1325	JURASSIC	1952	GULL LAKE SOUTH	UPPER SHAUNAVON
0.173	191	5.27	23.0	21.0	1.050	920	963	JURASSIC	1963	HAZLET	ROSERAY SAND (UNIT)
0.173	16	2.29	23.0	21.0	1.050	--	--	JURASSIC	--		ROSERAY SAND (NON-UNIT)
0.121	453	6.20	16.4	22.0	1.057	885	1280	JURASSIC	1965	ILLERBRUN	UPPER SHAUNAVON (VOLUNTARY UNIT)
0.116	105	5.83	15.7	22.0	1.057	--	--	JURASSIC	--		UPPER SHAUNAVON (NON-UNIT)
0.102	441	4.00	16.9	35.5	1.064	914	1372	JURASSIC	1954	INSTOW	UPPER SHAUNAVON (SOUTH VOL UNIT)
0.123	4244	4.68	13.8	5.0	1.064	914	--	JURASSIC	--		UPPER SHAUNAVON (UNIT)
0.077	16	2.44	8.6	5.0	1.064	922	--	JURASSIC	--		UPPER SHAUNAVON (NON-UNIT)
0.162	217	3.70	29.0	40.0	1.071	947	1013	CRETACEOUS	1955	JAVA	CANTUAR SAND
0.135	61	2.44	16.4	15.0	1.031	914	1188	JURASSIC	1953	JOHNSTON	UPPER SHAUNAVON (JOHNSTON UNIT)
0.110	971	4.63	15.7	25.6	1.064	914	1371	JURASSIC	1960	LEITCHVILLE	SHAUNAVON (VOLUNTARY UNIT)
0.088	1279	2.30	15.0	37.5	1.064	923	--	JURASSIC	--		SHAUNAVON (NON-UNIT)
0.124	1138	3.44	15.9	15.0	1.091	922	1371	JURASSIC	1953	LEON LAKE	SHAUNAVON
0.197	770	4.51	26.8	19.9	1.087	914	975	JURASSIC	1952	MAIN SUCCESS	ROSERAY SAND (MAIN UNIT)
0.237	364	4.66	32.9	25.0	1.042	968	1006	JURASSIC	1953	NORTH PREMIER	ROSERAY SAND (UNIT NO. 1)
0.164	635	4.45	26.7	35.8	1.046	--	--	JURASSIC	--		ROSERAY SAND (UNIT NO. 4)
0.186	49	4.66	25.8	25.0	1.042	917	--	JURASSIC	--		ROSERAY SAND (NON-UNIT)
0.109	49	4.57	16.1	25.0	1.111	914	1067	JURASSIC	1953	NORTH PREMIER	UPPER SHAUNAVON (UNIT NO. 1)
0.096	291	3.36	16.9	40.0	1.053	--	--	JURASSIC	--		UPPER SHAUNAVON (VOLUNTARY UNIT)
0.099	809	3.20	19.0	45.0	1.053	--	--	JURASSIC	--		UPPER SHAUNAVON (UNIT NO. 4)
0.099	194	4.11	19.0	45.0	1.053	--	--	JURASSIC	--		UPPER SHAUNAVON (NON-UNIT)
0.128	227	2.41	18.0	25.0	1.053	928	990	JURASSIC	1965	PENNANT	UPPER SHAUNAVON
0.097	3400	5.00	15.0	30.0	1.078	914	1402	JURASSIC	1953	RAPDAN	UPPER SHAUNAVON (UNIT)
0.158	497	5.06	17.7	5.0	1.064	--	--	JURASSIC	--		UPPER SHAUNAVON (N.RAPDAN VOL UNIT)
0.104	259	4.14	15.6	28.3	1.080	--	--	JURASSIC	--		UPPER SHAUNAVON (VOL UNIT NO. 2)
0.137	162	2.83	15.3	5.0	1.064	919	--	JURASSIC	--		UPPER SHAUNAVON (NON-UNIT)
0.121	939	3.64	13.5	5.0	1.064	921	1407	JURASSIC	1955	RAPDAN WEST	SHAUNAVON
0.156	261	5.66	24.0	30.0	1.075	934	975	JURASSIC	1953	SOUTH SUCCESS	ROSERAY SAND (SOUTHWEST UNIT)
0.193	732	6.07	27.4	23.4	1.089	914	--	JURASSIC	--		ROSERAY SAND (SUCCESS UNIT)
0.178	176	4.60	24.8	22.9	1.075	920	975	JURASSIC	1953	SUCCESS ALPHA	ROSERAY SAND (ALPHA UNIT)
0.148	259	5.48	22.7	30.0	1.075	929	966	JURASSIC	1966	SUCCESS NORTH	ROSERAY SAND (VOLUNTARY UNIT)
0.171	341	3.23	26.0	29.3	1.078	919	1036	JURASSIC	1954	SUFFIELD	ROSERAY SAND (UNIT NO.1)
0.157	593	2.99	26.0	35.0	1.078	--	--	JURASSIC	--		ROSERAY SAND (UNIT NO. 3)
0.157	32	2.13	26.0	35.0	1.078	--	--	JURASSIC	--		ROSERAY SAND (NON-UNIT)
0.128	699	3.60	17.6	25.0	1.031	914	1097	JURASSIC	1954	SUFFIELD	UPPER SHAUNAVON (UNIT NO. 2)
0.152	269	2.01	21.2	25.0	1.048	--	--	JURASSIC	--		UPPER SHAUNAVON (UNIT NO. 3)
0.124	113	3.66	17.0	25.0	1.031	937	--	JURASSIC	--		UPPER SHAUNAVON (NON-UNIT)

POOL	PRODUCING HORIZON	ORIGINAL OIL IN PLACE MILLION M3	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMMULATIVE PRODUCTION DEC 31/85	REMAINING RESERVES	1985 PROD. 1000 M3
			--------	PER CENT	-------	-------------	MILLION CUBIC	METRES	-------------		
VERLO	ROSERAY SAND (VERLO ROSERAY SD UNIT)	8.349	3.50	22.80	26.30	0.292	1.904	2.196	1.477	0.719	80.573
WHITEMUD	UPPER SHAUNAVON	1.640	3.10	0.00	3.10	0.051	0.000	0.051	0.046	0.005	1.279
MISCELLANEOUS	BASAL MANNVILLE SAND	0.334	3.00	0.00	3.00	0.010	0.000	0.010	0.009	0.001	0.000
	CANTUAR SAND	9.327	4.50	0.00	4.50	0.420	0.000	0.420	0.257	0.163	20.319
	GRAVELBOURG	0.167	10.80	0.00	10.80	0.018	0.000	0.018	0.013	0.005	0.986
	PREMIER SAND (N. PREMIER UNIT NO. 2)	0.232	15.00	13.00	28.00	0.035	0.030	0.065	0.060	0.005	0.828
	ROSERAY SAND	10.056	5.40	0.00	5.40	0.543	0.000	0.543	0.330	0.213	29.157
	LOWER ROSERAY	0.130	2.00	0.00	2.00	0.003	0.000	0.003	0.000	0.003	0.000
	UPPER ROSERAY	0.289	3.50	0.00	3.50	0.010	0.000	0.010	0.006	0.004	1.049
	SHAUNAVON	0.130	0.50	0.00	0.50	0.001	0.000	0.001	0.000	0.001	0.000
	LOWER SHAUNAVON	2.452	2.40	0.00	2.40	0.059	0.000	0.059	0.051	0.008	1.587
	UPPER SHAUNAVON	13.098	4.40	0.00	4.40	0.576	0.000	0.576	0.326	0.250	45.817
	TOTAL AREA III MEDIUM	397.482				38.266	54.830	93.096	77.891	15.205	1781.277
AREA IV - MEDIUM											
BENSON	MIDALE (NORTHWEST VOL UNIT)	0.479	6.50	0.00	6.50	0.031	0.000	0.031	0.029	0.002	1.759
	MIDALE (UNIT)	8.079	6.00	21.10	27.10	0.485	1.705	2.189	1.472	0.717	42.515
	MIDALE (VOLUNTARY UNIT NO. 1)	2.265	5.00	14.10	19.10	0.113	0.319	0.433	0.360	0.073	8.838
	MIDALE (NON-UNIT)	5.063	12.70	0.00	12.70	0.643	0.000	0.643	0.202	0.441	31.016
BROMHEAD	MIDALE	2.003	14.10	0.00	14.10	0.282	0.000	0.282	0.250	0.032	5.777
BRYANT	FROBISHER	0.341	8.80	0.00	8.80	0.030	0.000	0.030	0.012	0.018	2.621
BRYANT	MIDALE	2.126	4.40	0.00	4.40	0.094	0.000	0.094	0.040	0.054	7.119
FLAT LAKE	RATCLIFFE (NON-UNIT)	0.192	10.00	0.00	10.00	0.019	0.000	0.019	0.004	0.015	0.807
FREESTONE	FROBISHER-ALIDA	1.816	29.00	0.00	29.00	0.527	0.000	0.527	0.307	0.220	21.255
GRIFFIN	FROBISHER	0.636	20.00	0.00	20.00	0.127	0.000	0.127	0.126	0.001	1.314
HANDSWORTH	ALIDA	3.526	12.70	0.00	12.70	0.448	0.000	0.448	0.388	0.060	10.084
HARTAVEN	FROBISHER-ALIDA	0.537	33.30	0.00	33.30	0.179	0.000	0.179	0.080	0.099	7.597
HOFFER	RATCLIFFE LOWER POOL	1.275	17.00	0.00	17.00	0.217	0.000	0.217	0.212	0.005	0.561
HOFFER	RATCLIFFE UPPER POOL	0.318	14.50	0.00	14.50	0.046	0.000	0.046	0.038	0.008	1.117
HUME	FROBISHER	0.674	34.40	0.00	34.40	0.232	0.000	0.232	0.183	0.049	7.558
HUME	MIDALE	1.123	14.70	0.00	14.70	0.165	0.000	0.165	0.138	0.027	5.925
HUMMINGBIRD	RATCLIFFE (VOLUNTARY UNIT NO. 1)	4.114	10.00	6.40	16.40	0.411	0.263	0.675	0.498	0.177	24.428
HUNTOON	FROBISHER	10.701	5.00	0.00	5.00	0.535	0.000	0.535	0.500	0.035	13.368
HUNTOON	MIDALE (VOL. UNIT NO. 1)	4.443	5.00	3.80	8.80	0.222	0.169	0.391	0.291	0.100	7.634
	MIDALE (NON-UNIT)	2.471	5.00	0.00	5.00	0.124	0.000	0.124	0.061	0.063	16.458
INGOLDSBY	FROBISHER-ALIDA (NON-UNIT)	6.146	31.30	0.00	31.30	1.924	0.000	1.924	1.499	0.425	28.732
INNES	FROBISHER	15.454	14.30	0.00	14.30	2.210	0.000	2.210	1.770	0.440	43.721
LAKE ALMA	RATCLIFFE (VOLUNTARY UNIT)	2.379	17.00	35.70	52.70	0.404	0.849	1.254	0.629	0.625	13.945
LOST HORSE HILL	FROBISHER-ALIDA (VOL UNIT NO. 1)	8.209	26.00	0.00	26.00	2.134	0.000	2.134	1.909	0.225	33.091
	FROBISHER-ALIDA (NON-UNIT)	5.920	20.30	0.00	20.30	1.202	0.000	1.202	0.806	0.396	34.477
LOUGHEED	MIDALE	8.298	11.10	0.00	11.10	0.921	0.000	0.921	0.498	0.423	19.669
MACOUN	MIDALE	2.315	15.00	0.00	15.00	0.347	0.000	0.347	0.267	0.080	12.748
MACOUN WEST	MIDALE	0.793	9.10	0.00	9.10	0.072	0.000	0.072	0.042	0.030	4.153
MELROSE	FROBISHER-ALIDA	1.004	13.40	0.00	13.40	0.135	0.000	0.135	0.118	0.017	2.529
MIDALE	CENTRAL-FROBISHER	3.982	26.40	0.00	26.40	1.051	0.000	1.051	0.889	0.162	9.596
MIDALE	CENTRAL MIDALE (UNIT)	56.802	16.90	15.90	32.80	9.600	9.032	18.631	14.900	3.731	280.691
	CENTRAL MIDALE (NON-UNIT)	11.048	15.30	0.00	15.30	1.690	0.000	1.690	1.163	0.527	56.246
MINARD	MIDALE	0.484	4.10	0.00	4.10	0.020	0.000	0.020	0.006	0.014	1.092
MOOSE VALLEY	TILSTON	0.785	10.40	0.00	10.40	0.082	0.000	0.082	0.066	0.016	3.165
NEPTUNE	RATCLIFFE	3.857	12.70	0.00	12.70	0.490	0.000	0.490	0.260	0.230	16.856
NORTH HANDSWORTH	ALIDA	1.732	27.60	0.00	27.60	0.478	0.000	0.478	0.309	0.169	12.533
OUNGRE	RATCLIFFE (VOLUNTARY UNIT NO. 1)	14.529	7.90	7.00	14.90	1.148	1.017	2.165	1.059	1.106	40.650
	RATCLIFFE (NON-UNIT)	2.166	12.40	0.00	12.40	0.269	0.000	0.269	0.092	0.177	15.408
RALPH	MIDALE	0.885	15.70	0.00	15.70	0.139	0.000	0.139	0.127	0.012	5.269
RED JACKET	GRAVELBOURG	0.221	9.00	0.00	9.00	0.020	0.000	0.020	0.002	0.018	1.979
RED JACKET	SHAUNAVON-GRAVELBOURG	2.580	9.60	0.00	9.60	0.248	0.000	0.248	0.029	0.219	24.863
SKINNER LAKE	RATCLIFFE	0.941	6.20	0.00	6.20	0.058	0.000	0.058	0.006	0.052	4.603
STOUGHTON	FROBISHER-ALIDA	1.114	33.00	0.00	33.00	0.368	0.000	0.368	0.318	0.050	6.091
STOUGHTON SOUTH	FROBISHER	1.527	9.10	0.00	9.10	0.139	0.000	0.139	0.106	0.033	5.117
TATAGWA	MIDALE	13.936	5.50	0.00	5.50	0.767	0.000	0.767	0.229	0.538	50.353
VIEWFIELD	FROBISHER (NON-UNIT)	7.038	19.80	0.00	19.80	1.394	0.000	1.394	0.568	0.826	46.222
VIEW HILL	MIDALE	0.714	25.60	0.00	25.60	0.183	0.000	0.183	0.148	0.035	2.358
WAPELLA	WAPELLA SAND	9.990	22.20	0.00	22.20	2.218	0.000	2.218	1.251	0.967	67.128

OIL IN PLACE M3/M3	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	WATER SATURATION CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M3	AVERAGE DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL	PRODUCING HORIZON
0.181	898	5.15	27.5	29.1	1.080	920	963	JURASSIC	1956	VERLO	ROSERAY SAND (VERLO ROSERAY SD UNIT)
0.163	323	3.11	22.1	20.0	1.083	924	1432	JURASSIC	1953	WHITEMUD	UPPER SHAUNAVON
0.113	65	4.57	20.0	25.0	1.333	--	--	CRETACEOUS	--	MISCELLANEOUS	BASAL MANNVILLE SAND
0.145	1385	4.66	23.9	35.0	1.075	--	--	CRETACEOUS	--		CANTUAR SAND
0.094	65	2.74	16.7	25.0	1.333	--	--	JURASSIC	--		GRAVELBOURG
0.221	75	1.40	30.8	25.0	1.046	--	--	CRETACEOUS	--		PREMIER SAND (N. PREMIER UNIT NO. 2)
0.174	1014	5.70	23.8	25.0	1.026	--	--	JURASSIC	--		ROSERAY SAND
0.190	32	2.13	27.2	24.6	1.079	--	--	JURASSIC	--		LOWER ROSERAY
0.181	32	4.98	26.0	25.0	1.075	--	--	JURASSIC	--		UPPER ROSERAY
0.074	32	5.49	10.4	25.0	1.053	--	--	JURASSIC	--		SHAUNAVON
0.109	388	5.80	15.3	25.0	1.053	--	--	JURASSIC	--		LOWER SHAUNAVON
0.109	3343	3.60	15.6	25.0	1.075	--	--	JURASSIC	--		UPPER SHAUNAVON
											TOTAL AREA III MEDIUM
											AREA IV - MEDIUM
0.093	227	2.76	15.0	30.0	1.124	875	1371	MISSISSIPPIAN	1956	BENSON	MIDALE (NORTHWEST VOL UNIT)
0.151	2978	1.80	24.2	30.0	1.124	875	1371	MISSISSIPPIAN	1956		MIDALE (UNIT)
0.151	1117	1.34	24.3	30.0	1.124	--	1371	MISSISSIPPIAN	1956		MIDALE (VOLUNTARY UNIT NO. 1)
0.113	1942	2.30	18.2	30.0	1.124	886	--	MISSISSIPPIAN	--		MIDALE (NON-UNIT)
0.079	518	4.88	13.7	35.0	1.124	903	1693	MISSISSIPPIAN	1965	BROWNHEAD	MIDALE
0.041	194	4.30	9.1	50.0	1.112	895	1433	MISSISSIPPIAN	1979	BRYANT	FROBISHER
0.137	1036	1.50	28.5	46.0	1.125	904	1406	MISSISSIPPIAN	1979	BRYANT	MIDALE
0.034	65	8.60	8.1	49.2	1.199	867	1956	MISSISSIPPIAN	1965	FLAT LAKE	RATCLIFFE (NON-UNIT)
0.061	591	5.00	12.6	35.0	1.333	879	1180	MISSISSIPPIAN	1953	FREESTONE	FROBISHER-ALIDA
0.047	453	2.99	8.4	35.0	1.163	885	1302	MISSISSIPPIAN	1958	GRIFFIN	FROBISHER
0.054	1068	6.10	11.1	35.0	1.333	886	1204	MISSISSIPPIAN	1964	HANDSWORTH	ALIDA
0.074	226	3.20	13.9	40.0	1.124	876	1199	MISSISSIPPIAN	1965	HARTAVEN	FROBISHER-ALIDA
0.072	259	6.81	13.9	35.0	1.250	869	1935	MISSISSIPPIAN	1964	HOFFER	RATCLIFFE LOWER POOL
0.071	130	3.43	13.7	35.0	1.250	875	1927	MISSISSIPPIAN	1964	HOFFER	RATCLIFFE UPPER POOL
0.043	421	3.69	7.5	35.0	1.124	883	1350	MISSISSIPPIAN	1967	HUME	FROBISHER
0.069	777	2.10	11.9	35.0	1.124	869	1332	MISSISSIPPIAN	1968	HUME	MIDALE
0.087	442	10.70	14.0	30.6	1.117	870	1890	MISSISSIPPIAN	1966	HUMMINGBIRD	RATCLIFFE (VOLUNTARY UNIT NO. 1)
0.058	2056	9.00	10.0	35.0	1.124	892	1372	MISSISSIPPIAN	1957	HUNTOON	FROBISHER
0.104	1230	3.47	18.0	35.0	1.124	874	1359	MISSISSIPPIAN	1957	HUNTOON	MIDALE (VOL. UNIT NO. 1)
0.052	987	4.81	9.0	35.0	1.124	890	--	MISSISSIPPIAN	--		MIDALE (NON-UNIT)
0.079	1182	6.60	13.0	30.0	1.155	876	1089	MISSISSIPPIAN	1955	INGOLDSBY	FROBISHER-ALIDA (NON-UNIT)
0.056	1975	14.00	10.0	35.0	1.163	891	1333	MISSISSIPPIAN	1965	INNES	FROBISHER
0.128	437	4.24	23.5	40.0	1.098	874	1981	MISSISSIPPIAN	1965	LAKE ALMA	RATCLIFFE (VOLUNTARY UNIT)
0.077	583	18.29	15.3	45.0	1.093	848	1174	MISSISSIPPIAN	1963	LOST HORSE HILL	FROBISHER-ALIDA (VOL UNIT NO. 1)
0.082	599	12.10	15.3	40.0	1.124	897	--	MISSISSIPPIAN	--		FROBISHER-ALIDA (NON-UNIT)
0.099	810	10.30	17.2	35.0	1.124	873	1407	MISSISSIPPIAN	1959	LOUGHEED	MIDALE
0.064	971	3.71	11.5	35.0	1.163	895	1531	MISSISSIPPIAN	1969	MACOUN	MIDALE
0.041	259	7.44	8.7	45.0	1.163	888	1559	MISSISSIPPIAN	1970	MACOUN WEST	MIDALE
0.069	259	5.58	14.2	45.0	1.124	878	1169	MISSISSIPPIAN	1963	MELROSE	FROBISHER-ALIDA
0.055	1137	6.40	12.3	50.0	1.124	881	1411	MISSISSIPPIAN	1953	MIDALE	CENTRAL-FROBISHER
0.088	12335	5.24	16.3	39.4	1.124	877	1402	MISSISSIPPIAN	1953	MIDALE	CENTRAL MIDALE (UNIT)
0.097	3742	3.05	17.0	36.0	1.124	883	--	MISSISSIPPIAN	--		CENTRAL MIDALE (NON-UNIT)
0.104	194	2.40	23.3	45.0	1.234	905	1340	MISSISSIPPIAN	1956	MINARD	MIDALE
0.072	138	7.92	13.3	40.0	1.111	909	1163	MISSISSIPPIAN	1958	MOOSE VALLEY	TILSTON
0.079	1004	4.85	16.0	45.0	1.111	910	1764	MISSISSIPPIAN	1967	NEPTUNE	RATCLIFFE
0.048	785	4.57	9.9	35.0	1.333	885	1176	MISSISSIPPIAN	1965	NORTH HANDSWORTH	ALIDA
0.080	2784	6.52	17.9	45.0	1.230	867	1828	MISSISSIPPIAN	1959	OUNGRE	RATCLIFFE (VOLUNTARY UNIT NO. 1)
0.087	1036	2.41	19.4	45.0	1.230	878	--	MISSISSIPPIAN	--		RATCLIFFE (NON-UNIT)
0.051	777	2.25	12.9	55.9	1.124	863	1315	MISSISSIPPIAN	1973	RALPH	MIDALE
0.192	32	3.60	31.0	38.0	1.003	930	735	JURASSIC	1985	RED JACKET	GRAVELBOURG
0.171	304	4.97	27.4	37.5	1.003	948	665	JURASSIC	1984	RED JACKET	SHAUNAVON-GRAVELBOURG
0.099	259	3.67	20.0	45.0	1.111	--	1723	MISSISSIPPIAN	1969	SKINNER LAKE	RATCLIFFE
0.055	473	4.30	9.8	35.0	1.163	882	1268	MISSISSIPPIAN	1960	STOUGHTON	FROBISHER-ALIDA
0.036	518	8.20	7.6	45.0	1.163	892	1265	MISSISSIPPIAN	1974	STOUGHTON SOUTH	FROBISHER
0.098	1263	11.30	16.3	35.0	1.085	904	1478	MISSISSIPPIAN	1977	TATAGWA	MIDALE
0.070	841	12.02	13.7	35.0	1.279	872	1270	MISSISSIPPIAN	1969	VIEWFIELD	FROBISHER (NON-UNIT)
0.049	259	5.61	11.1	50.0	1.129	885	1539	MISSISSIPPIAN	1959	VIEW HILL	MIDALE
0.179	939	5.95	25.8	30.0	1.010	906	701	CRET-JURASSIC	1952	WAPELLA	WAPELLA SAND

POOL	PRODUCING HORIZON	ORIGINAL OIL IN PLACE MILLION M3	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PRODUCTION DEC 31/85	REMAINING RESERVES	1985 PROD. 1000 M3
			--------	PER CENT	-------	-------------	MILLION CUBIC	METRES	-------------		
WEIR HILL	FROBISHER	0.957	6.40	0.00	6.40	0.061	0.000	0.061	0.049	0.012	1.624
WEST INNES	FROBISHER	0.694	24.00	0.00	24.00	0.167	0.000	0.167	0.159	0.008	1.842
WEST KINGSFORD	MIDALE (CULLEN UNIT)	0.882	50.90	0.00	50.90	0.449	0.000	0.449	0.414	0.035	5.612
	MIDALE (NON-UNIT)	2.855	20.70	0.00	20.70	0.591	0.000	0.591	0.516	0.075	9.258
WEYBURN	FROBISHER	3.412	18.70	0.00	18.70	0.638	0.000	0.638	0.415	0.223	21.776
WEYBURN	MIDALE (UNIT)	176.185	13.50	13.90	27.40	23.785	24.490	48.275	41.220	7.055	552.083
	MIDALE (NON-UNIT)	22.457	9.10	0.00	9.10	2.044	0.000	2.044	1.247	0.797	126.469
WEYBURN NORTH	FROBISHER	1.750	3.20	0.00	3.20	0.056	0.000	0.056	0.024	0.032	5.477
WEYBURN NORTH	MIDALE	3.155	4.40	0.00	4.40	0.139	0.000	0.139	0.026	0.113	14.283
MISCELLANEOUS	ALIDA	0.284	20.10	0.00	20.10	0.057	0.000	0.057	0.042	0.015	1.890
	BAKKEN	0.104	10.50	0.00	10.50	0.011	0.000	0.011	0.002	0.009	0.467
	BIRDBEAR	0.397	9.50	0.00	9.50	0.038	0.000	0.038	0.004	0.034	3.804
	FROBISHER	6.723	8.60	0.00	8.60	0.578	0.000	0.578	0.215	0.363	35.674
	FROBISHER-ALIDA	0.214	7.90	0.00	7.90	0.017	0.000	0.017	0.008	0.009	1.654
	GRAVELBOURG	0.131	7.50	0.00	7.50	0.010	0.000	0.010	0.000	0.010	0.305
	JURASSIC	3.530	5.70	0.00	5.70	0.201	0.000	0.201	0.109	0.092	12.535
	LOWER WATROUS	0.110	17.30	0.00	17.30	0.019	0.000	0.019	0.016	0.003	0.592
	MIDALE	44.996	4.00	0.00	4.00	1.800	0.000	1.800	0.493	1.307	170.335
	RATCLIFFE	3.098	14.60	0.00	14.60	0.452	0.000	0.452	0.193	0.259	19.139
	SOURIS VALLEY	0.166	4.20	0.00	4.20	0.007	0.000	0.007	0.005	0.002	0.995
	TOTAL AREA IV MEDIUM	509.127				65.756	37.844	103.600	79.414	24.186	2047.054
AREA IV - LIGHT											
ALAMEDA	MIDALE (CENTRAL UNIT)	1.166	11.70	26.20	37.90	0.136	0.305	0.442	0.376	0.066	8.044
	MIDALE (EAST UNIT)	4.844	16.00	22.00	38.00	0.775	1.066	1.841	1.470	0.371	26.870
	MIDALE (NORTH UNIT)	1.001	12.00	16.50	28.50	0.120	0.165	0.285	0.251	0.034	3.478
	MIDALE (SOUTH UNIT)	1.792	13.30	13.00	26.30	0.238	0.233	0.471	0.405	0.066	6.884
	MIDALE (NON-UNIT)	3.228	11.00	0.00	11.00	0.355	0.000	0.355	0.161	0.194	26.582
ALAMEDA WEST	FROBISHER	0.151	1.00	0.00	1.00	0.002	0.000	0.002	0.000	0.002	0.000
ALAMEDA WEST	MIDALE (VOLUNTARY UNIT NO.1)	0.771	11.20	19.70	30.90	0.086	0.152	0.238	0.025	0.213	4.632
	MIDALE (NON-UNIT)	0.122	1.50	0.00	1.50	0.002	0.000	0.002	0.001	0.001	0.384
ALIDA EAST	FROBISHER-ALIDA (UNIT)	11.208	18.70	0.00	18.70	2.096	0.000	2.096	1.784	0.312	24.892
	FROBISHER-ALIDA (NON-UNIT)	0.419	10.00	0.00	10.00	0.042	0.000	0.042	0.032	0.010	2.023
ALIDA WEST	ALIDA	7.354	29.00	0.00	29.00	2.133	0.000	2.133	1.767	0.366	33.694
ARCOLA	FROBISHER-ALIDA	4.241	34.00	0.00	34.00	1.442	0.000	1.442	0.913	0.529	40.256
AUBURNTON	FROBISHER-ALIDA	0.311	22.00	0.00	22.00	0.069	0.000	0.069	0.003	0.066	2.543
BIENFAIT	MIDALE BEDS	3.161	17.50	0.00	17.50	0.553	0.000	0.553	0.143	0.410	44.483
BROWNING	FROBISHER-ALIDA	6.391	17.80	0.00	17.80	1.138	0.000	1.138	0.819	0.319	30.804
CANTAL	FROBISHER-ALIDA (VOL UNIT NO. 1)	0.185	43.00	0.00	43.00	0.079	0.000	0.079	0.049	0.030	2.494
	FROBISHER-ALIDA (NON-UNIT)	2.980	8.00	0.00	8.00	0.238	0.000	0.238	0.106	0.132	31.888
CANTAL SOUTH	FROBISHER-ALIDA	2.631	30.50	0.00	30.50	0.803	0.000	0.803	0.703	0.100	10.579
CARNDUFF	FROBISHER	2.113	31.50	0.00	31.50	0.666	0.000	0.666	0.514	0.152	15.376
CARNDUFF	MIDALE (EAST UNIT)	8.337	15.00	23.80	38.80	1.251	1.984	3.235	2.656	0.579	34.489
	MIDALE (SOUTH VOL UNIT)	1.102	15.00	25.00	40.00	0.165	0.276	0.441	0.069	0.372	5.742
	MIDALE (WEST UNIT)	3.435	13.00	30.30	43.30	0.447	1.041	1.487	1.407	0.080	11.747
	MIDALE (VOLUNTARY UNIT NO. 1)	0.416	5.20	15.40	20.60	0.022	0.064	0.086	0.049	0.037	2.143
	MIDALE (NON-UNIT)	0.778	21.00	2.40	23.40	0.163	0.019	0.182	0.148	0.034	5.353
CLARILAW	FROBISHER-ALIDA	0.631	24.50	0.00	24.50	0.155	0.000	0.155	0.095	0.060	6.994
CLAIRLAW WEST	FROBISHER-ALIDA (KISBEY VOL UNIT)	0.624	23.50	0.00	23.50	0.147	0.000	0.147	0.095	0.052	7.525
	FROBISHER-ALIDA (NON-UNIT)	0.082	20.50	0.00	20.50	0.017	0.000	0.017	0.004	0.013	2.381
CRYSTAL HILL	SOURIS VALLEY	0.997	8.50	0.00	8.50	0.085	0.000	0.085	0.069	0.016	1.815
DALESBORO	FROBISHER-ALIDA	0.173	23.00	0.00	23.00	0.040	0.000	0.040	0.027	0.013	0.751
EAST PINTO	FROBISHER	0.024	5.00	0.00	5.00	0.001	0.000	0.001	0.000	0.001	0.000
EAST PINTO	MIDALE	0.046	8.50	0.00	8.50	0.004	0.000	0.004	0.003	0.001	0.379
EDENVALE	TILSTON	1.775	6.00	0.00	6.00	0.107	0.000	0.107	0.069	0.038	4.725
ELMORE	FROBISHER (VOLUNTARY UNIT)	4.938	28.00	13.60	41.60	1.383	0.672	2.054	1.685	0.369	38.166
	FROBISHER (NON-UNIT)	0.553	9.30	0.00	9.30	0.051	0.000	0.051	0.022	0.029	3.077
ELMORE	MIDALE	0.292	25.00	0.00	25.00	0.073	0.000	0.073	0.064	0.009	1.588
FERTILE	TILSTON	0.439	4.10	0.00	4.10	0.018	0.000	0.018	0.008	0.010	2.231
FLAT LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)	8.181	10.00	15.00	25.00	0.818	1.227	2.045	1.508	0.537	57.642
	RATCLIFFE (NON-UNIT)	1.341	2.50	0.00	2.50	0.034	0.000	0.034	0.007	0.027	3.199
FLORENCE	FROBISHER	0.594	19.40	0.00	19.40	0.115	0.000	0.115	0.108	0.007	1.647
FREDA LAKE	RATCLIFFE	7.327	12.80	0.00	12.80	0.938	0.000	0.938	0.464	0.474	46.054

OIL IN PLACE M3/M3	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	WATER SATURATION CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M3	AVERAGE DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL	PRODUCING HORIZON
0.053	178	10.21	10.8	35.0	1.333	871	1353	MISSISSIPPIAN	1968	WEIR HILL	FROBISHER
0.050	259	5.33	9.0	35.0	1.163	893	1335	MISSISSIPPIAN	1965	WEST INNES	FROBISHER
0.057	291	5.36	10.4	35.0	1.196	895	1485	MISSISSIPPIAN	1955	WEST KINGSFORD	MIDALE (CULLEN UNIT)
0.063	831	5.49	11.6	35.0	1.205	882	--	MISSISSIPPIAN	--		MIDALE (NON-UNIT)
0.051	1359	4.90	9.6	40.0	1.124	876	1417	MISSISSIPPIAN	1954	WEYBURN	FROBISHER
0.105	21529	7.83	17.2	31.7	1.124	884	1399	MISSISSIPPIAN	1954	WEYBURN	MIDALE (UNIT)
0.106	5811	3.66	17.2	31.0	1.124	877	--	MISSISSIPPIAN	--		MIDALE (NON-UNIT)
0.083	356	5.94	15.5	40.0	1.124	886	1376	MISSISSIPPIAN	1965	WEYBURN NORTH	FROBISHER
0.062	810	6.29	11.6	40.0	1.124	879	1354	MISSISSIPPIAN	1956	WEYBURN NORTH	MIDALE
0.068	65	6.40	14.0	35.0	1.333	880	--	MISSISSIPPIAN	--	MISCELLANEOUS	ALIDA
0.058	64	2.80	8.2	25.0	1.064	--	--	MISSISSIPPIAN	--		BAKKEN
0.088	129	3.50	13.8	25.0	1.176	--	--	DEVONIAN	--		BIRDBEAR
0.036	2171	8.49	8.2	50.0	1.124	885	--	MISSISSIPPIAN	--		FROBISHER
0.044	65	7.50	9.0	35.0	1.333	874	--	MISSISSIPPIAN	--		FROBISHER-ALIDA
0.163	32	2.50	29.0	25.0	1.333	--	--	JURASSIC	--		GRAVELBOURG
0.189	299	6.24	27.3	30.0	1.010	897	--	JURASSIC	--		JURASSIC
0.105	49	2.13	18.7	25.0	1.333	--	--	JURASSIC	--		LOWER WATROUS
0.062	4915	14.70	14.0	50.0	1.124	885	--	MISSISSIPPIAN	--		MIDALE
0.080	972	4.00	16.3	35.0	1.333	869	--	MISSISSIPPIAN	--		RATCLIFFE
0.040	32	13.00	7.4	40.0	1.111	--	--	MISSISSIPPIAN	--		SOURIS VALLEY
											TOTAL AREA IV MEDIUM
											AREA IV - LIGHT
0.068	680	2.53	16.3	42.8	1.376	823	1347	MISSISSIPPIAN	1956	ALAMEDA	MIDALE (CENTRAL UNIT)
0.074	2363	2.77	17.2	40.8	1.376	826	--	MISSISSIPPIAN	--		MIDALE (EAST UNIT)
0.069	421	3.44	16.6	42.7	1.376	--	--	MISSISSIPPIAN	--		MIDALE (NORTH UNIT)
0.059	906	3.35	14.5	45.0	1.351	--	--	MISSISSIPPIAN	--		MIDALE (SOUTH UNIT)
0.046	1619	4.30	11.0	42.0	1.376	842	--	MISSISSIPPIAN	--		MIDALE (NON-UNIT)
0.043	32	11.00	8.8	35.0	1.333	844	1381	MISSISSIPPIAN	1982	ALAMEDA WEST	FROBISHER
0.048	181	8.94	11.7	45.0	1.351	843	1356	MISSISSIPPIAN	--	ALAMEDA WEST	MIDALE (VOLUNTARY UNIT NO.1)
0.048	32	8.00	11.7	45.0	1.351	--	--	MISSISSIPPIAN	--		MIDALE (NON-UNIT)
0.087	1619	7.99	16.5	30.0	1.333	824	1122	MISSISSIPPIAN	1954	ALIDA EAST	ALIDA (UNIT)
0.081	65	7.92	16.7	35.0	1.333	--	--	MISSISSIPPIAN	--		ALIDA (NON-UNIT)
0.074	1019	9.75	14.3	31.0	1.333	836	1143	MISSISSIPPIAN	1955	ALIDA WEST	ALIDA
0.080	955	5.58	15.5	35.0	1.266	854	1199	MISSISSIPPIAN	1964	ARCOLA	FROBISHER-ALIDA
0.064	65	7.50	13.1	35.0	1.333	832	1197	MISSISSIPPIAN	1985	AUBURNTON	FROBISHER-ALIDA
0.044	518	13.80	8.0	35.0	1.176	852	1589	MISSISSIPPIAN	1980	BIENFAIT	MIDALE BEDS
0.063	1408	7.16	13.0	35.0	1.333	853	1280	MISSISSIPPIAN	1957	BROWNING	FROBISHER-ALIDA
0.032	97	5.91	6.9	35.0	1.393	823	1196	MISSISSIPPIAN	1956	CANTAL	FROBISHER-ALIDA (VOL UNIT NO. 1)
0.066	566	7.94	13.6	35.0	1.333	834	--	MISSISSIPPIAN	--		FROBISHER-ALIDA (NON-UNIT)
0.033	518	15.32	6.8	35.0	1.333	828	1135	MISSISSIPPIAN	1956	CANTAL SOUTH	FROBISHER-ALIDA
0.071	654	4.57	14.5	35.0	1.333	854	1298	MISSISSIPPIAN	1956	CARNDUFF	FROBISHER
0.076	5568	1.98	14.4	30.0	1.333	844	1280	MISSISSIPPIAN	1955	CARNDUFF	MIDALE (EAST UNIT)
0.064	680	2.53	12.2	30.0	1.333	839	--	MISSISSIPPIAN	--		MIDALE (SOUTH VOL UNIT)
0.068	2104	2.41	12.9	30.0	1.333	844	--	MISSISSIPPIAN	--		MIDALE (WEST UNIT)
0.072	214	2.70	13.7	30.0	1.333	--	--	MISSISSIPPIAN	--		MIDALE (VOLUNTARY UNIT NO. 1)
0.066	518	2.28	13.1	33.0	1.333	835	--	MISSISSIPPIAN	--		MIDALE (NON-UNIT)
0.057	259	4.27	11.7	35.0	1.333	858	1231	MISSISSIPPIAN	1963	CLARILAW	FROBISHER-ALIDA
0.059	194	5.43	11.4	35.0	1.250	843	1234	MISSISSIPPIAN	1963	CLAIRLAW WEST	FROBISHER-ALIDA (KISBEY VOL UNIT)
0.054	32	4.80	10.3	35.0	1.250	--	--	MISSISSIPPIAN	--		FROBISHER-ALIDA (NON-UNIT)
0.059	324	5.18	11.0	40.0	1.111	861	1113	MISSISSIPPIAN	1966	CRYSTAL HILL	SOURIS VALLEY
0.055	65	4.88	11.2	35.0	1.333	853	1262	MISSISSIPPIAN	1966	DALESBORO	FROBISHER-ALIDA
0.045	32	1.68	9.2	35.0	1.333	--	1542	MISSISSIPPIAN	1974	EAST PINTO	FROBISHER
0.043	32	3.35	10.4	45.0	1.333	--	1538	MISSISSIPPIAN	1974	EAST PINTO	MIDALE
0.068	330	7.97	12.5	40.0	1.111	853	1126	MISSISSIPPIAN	1963	EDENVALE	TILSTON
0.081	874	7.01	15.9	41.1	1.162	871	1219	MISSISSIPPIAN	1961	ELMORE	FROBISHER (VOLUNTARY UNIT)
0.039	164	8.59	8.3	45.0	1.162	875	--	MISSISSIPPIAN	--		FROBISHER (NON-UNIT)
0.056	194	2.71	11.4	35.0	1.333	841	1204	MISSISSIPPIAN	1961	ELMORE	MIDALE
0.079	81	6.87	14.6	40.0	1.111	860	993	MISSISSIPPIAN	1983	FERTILE	TILSTON
0.060	2428	5.64	14.1	49.2	1.199	865	1956	MISSISSIPPIAN	1965	FLAT LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)
0.057	324	7.30	10.9	35.0	1.250	848	--	MISSISSIPPIAN	--		RATCLIFFE (NON-UNIT)
0.058	162	6.37	11.8	35.0	1.333	843	1290	MISSISSIPPIAN	1965	FLORENCE	FROBISHER
0.122	2056	2.92	22.7	40.0	1.116	870	1694	MISSISSIPPIAN	1967	FREDA LAKE	RATCLIFFE

POOL	PRODUCING HORIZON	ORIGINAL OIL IN PLACE MILLION M3	ESTIMATED RECOVERY PER CENT			INITIAL RESERVES MILLION CUBIC METRES			CUMMULATIVE PRODUCTION DEC 31/85	REMAINING RESERVES	1985 PROD. 1000 M3
			PRIMARY	ENHANCED	TOTAL	PRIMARY	ENHANCED	TOTAL			
FRYS	TILSTON-SOURIS VALLEY	2.318	6.80	0.00	6.80	0.158	0.000	0.158	0.101	0.057	6.865
GAINSBOROUGH	FROBISHER-ALIDA (VOL UNIT)	1.090	10.00	4.50	14.50	0.109	0.049	0.158	0.128	0.030	2.936
	FROBISHER-ALIDA (NON-UNIT)	2.359	8.50	0.00	8.50	0.200	0.000	0.200	0.112	0.088	8.311
GLEN EWEN	FROBISHER	0.982	18.00	0.00	18.00	0.177	0.000	0.177	0.129	0.048	4.948
GLEN EWEN	MIDALE (UNIT)	5.989	13.00	6.40	19.40	0.779	0.383	1.162	0.989	0.173	12.846
	MIDALE (NON-UNIT)	0.265	3.80	0.00	3.80	0.010	0.000	0.010	0.003	0.007	1.382
HASTINGS	FROBISHER (UNIT)	2.381	28.60	1.90	30.50	0.681	0.045	0.726	0.680	0.046	7.597
	FROBISHER (VOL UNIT NO. 1)	4.702	17.00	8.20	25.20	0.799	0.386	1.185	1.047	0.138	20.343
	FROBISHER (VOL UNIT NO. 2)	5.732	11.00	2.80	13.80	0.631	0.160	0.791	0.766	0.025	7.076
	FROBISHER (NON-UNIT)	11.700	17.00	0.00	17.00	1.989	0.000	1.989	1.657	0.332	46.335
HASTINGS EAST	FROBISHER	1.817	17.70	0.00	17.70	0.322	0.000	0.322	0.149	0.173	21.940
HAZELWOOD	TILSTON	1.685	12.00	0.00	12.00	0.202	0.000	0.202	0.153	0.049	7.839
HOFFER	RATCLIFFE LOWER POOL	0.894	10.00	0.00	10.00	0.089	0.000	0.089	0.056	0.033	2.683
HOFFER	RATCLIFFE UPPER POOL	1.462	8.00	0.00	8.00	0.117	0.000	0.117	0.056	0.061	7.118
HUMMINGBIRD	BIRDBEAR (VOLUNTARY UNIT NO. 1)	1.178	41.00	0.00	41.00	0.483	0.000	0.483	0.434	0.049	8.974
INGOLDSBY	FROBISHER-ALIDA (VOL UNIT)	8.312	34.00	0.00	34.00	2.826	0.000	2.826	2.178	0.648	29.569
	FROBISHER-ALIDA (NON-UNIT)	2.692	10.50	0.00	10.50	0.283	0.000	0.283	0.083	0.200	14.627
KENOSEE	TILSTON (VOLUNTARY UNIT)	4.060	59.00	0.00	59.00	2.396	0.000	2.396	1.839	0.557	52.675
KISBEY	BIRDBEAR	1.567	13.50	0.00	13.50	0.212	0.000	0.212	0.125	0.087	12.895
LIGHTNING	TILSTON	0.832	8.00	0.00	8.00	0.067	0.000	0.067	0.042	0.025	2.379
MOOSE MOUNTAIN	TILSTON	2.665	28.00	0.00	28.00	0.746	0.000	0.746	0.474	0.272	28.997
MORRISVIEW	FROBISHER-ALIDA	0.617	30.00	0.00	30.00	0.185	0.000	0.185	0.169	0.016	3.787
NORTH ANTLER	MIDALE (VOLUNTARY UNIT NO. 1)	0.762	8.00	5.00	13.00	0.061	0.038	0.099	0.096	0.003	1.093
NORTHGATE	FROBISHER	0.221	19.00	0.00	19.00	0.042	0.000	0.042	0.041	0.001	0.338
NORTHGATE	MIDALE (VOLUNTARY UNIT)	3.092	9.00	1.80	10.80	0.278	0.056	0.334	0.247	0.087	5.295
	MIDALE (NON UNIT)	0.023	30.00	0.00	30.00	0.007	0.000	0.007	0.006	0.001	0.612
NOTTINGHAM	ALIDA (NORTH ALIDA BEDS UNIT)	9.409	19.70	0.00	19.70	1.854	0.000	1.854	1.433	0.421	24.871
	ALIDA (NON-UNIT)	3.614	25.50	0.00	25.50	0.922	0.000	0.922	0.793	0.129	13.527
OAKLEY	FROBISHER	0.533	22.00	0.00	22.00	0.117	0.000	0.117	0.105	0.012	1.912
PARKMAN	SOURIS VALLEY	1.366	13.00	0.00	13.00	0.178	0.000	0.178	0.152	0.026	8.257
PARKMAN	TILSTON	0.698	25.00	0.00	25.00	0.174	0.000	0.174	0.115	0.059	8.418
PARKMAN	TILSTON-SOURIS VALLEY	28.040	15.60	0.00	15.60	4.374	0.000	4.374	3.063	1.311	143.295
PARKMAN SOUTH	TILSTON-SOURIS VALLEY	1.678	10.00	0.00	10.00	0.168	0.000	0.168	0.109	0.059	4.037
PINTO	FROBISHER	1.438	30.00	0.00	30.00	0.431	0.000	0.431	0.384	0.047	12.291
PINTO	MIDALE (SOUTH PINTO UNIT)	5.575	10.40	2.00	12.40	0.580	0.112	0.691	0.582	0.109	10.473
	MIDALE (NON-UNIT)	7.648	9.00	0.00	9.00	0.688	0.000	0.688	0.481	0.207	27.819
QUEENSDALE EAST	FROBISHER-ALIDA (NORTH CANTAL UNIT)	1.719	58.00	0.00	58.00	0.997	0.000	0.997	0.914	0.083	16.261
	FROBISHER-ALIDA (NON-UNIT)	13.820	48.50	0.00	48.50	6.703	0.000	6.703	4.164	2.539	171.238
QUEENSDALE NORTH	ALIDA	0.857	30.50	0.00	30.50	0.261	0.000	0.261	0.212	0.049	6.934
QUEENSDALE WEST	ALIDA	2.212	39.00	0.00	39.00	0.863	0.000	0.863	0.698	0.165	13.219
ROCANVILLE	BAKKEN SAND	2.200	23.50	0.00	23.50	0.517	0.000	0.517	0.285	0.232	10.262
RONCOTT	BAKKEN SAND	0.758	14.50	0.00	14.50	0.110	0.000	0.110	0.098	0.012	1.704
ROSEBANK	FROBISHER-ALIDA (VOL UNIT NO. 1)	8.667	45.50	0.00	45.50	3.944	0.000	3.944	3.489	0.455	35.345
	ALIDA (NON-UNIT)	7.853	18.70	0.00	18.70	1.469	0.000	1.469	0.973	0.496	32.611
ROSEBANK SOUTH	ALIDA	1.207	16.00	0.00	16.00	0.193	0.000	0.193	0.116	0.077	8.119
SHERWOOD	FROBISHER	3.520	54.00	0.00	54.00	1.901	0.000	1.901	1.645	0.256	31.602
SILVERTON	FROBISHER	0.536	15.50	0.00	15.50	0.083	0.000	0.083	0.074	0.009	1.578
SKINNER LAKE	RATCLIFFE	3.898	17.30	0.00	17.30	0.674	0.000	0.674	0.228	0.446	16.467
SOURIS FLAT	FROBISHER	2.817	24.30	0.00	24.30	0.684	0.000	0.684	0.564	0.120	14.351
SOUTH FLETWODE	TILSTON	1.504	33.00	0.00	33.00	0.496	0.000	0.496	0.415	0.081	12.690
STAR VALLEY	FROBISHER-ALIDA	4.389	53.50	0.00	53.50	2.348	0.000	2.348	1.212	1.136	80.420
STEELMAN	FROBISHER (VOL UNIT NO. 1)	0.903	29.50	0.00	29.50	0.266	0.000	0.266	0.253	0.013	2.997
	FROBISHER (DOUGLASTON UNIT)	0.852	26.50	0.00	26.50	0.226	0.000	0.226	0.198	0.028	3.005
	FROBISHER (NON-UNIT)	5.293	32.30	0.00	32.30	1.710	0.000	1.710	1.537	0.173	31.157
STEELMAN	MIDALE (UNIT IA)	18.404	16.00	32.20	48.20	2.945	5.926	8.871	8.205	0.666	94.029
	MIDALE (UNIT II)	16.561	23.10	28.60	51.70	3.826	4.736	8.562	7.656	0.906	30.053
	MIDALE (UNIT III)	11.451	16.00	22.70	38.70	1.832	2.599	4.431	3.957	0.474	57.959
	MIDALE (UNIT IV)	13.324	15.00	26.30	41.30	1.999	3.504	5.503	4.742	0.761	92.624
	MIDALE (UNIT V)	6.440	15.00	11.80	26.80	0.966	0.760	1.726	1.603	0.123	16.667
	MIDALE (UNIT VI)	24.826	16.20	22.00	38.20	4.022	5.462	9.484	8.708	0.776	80.615
	MIDALE (UNIT VII)	2.561	10.40	23.30	33.70	0.266	0.597	0.863	0.735	0.128	13.992
	MIDALE (DOUGLASTON UNIT)	1.948	12.30	14.90	27.20	0.240	0.290	0.530	0.422	0.108	11.480
	MIDALE (LANPMAN UNIT)	0.926	13.00	13.00	26.00	0.120	0.120	0.241	0.218	0.023	3.407
	MIDALE (NORTH VOL UNIT NO. 1)	1.949	15.00	12.80	27.80	0.292	0.249	0.542	0.139	0.403	16.013
	MIDALE (NORTH VOL UNIT NO. 2)	1.817	5.30	0.00	5.30	0.096	0.000	0.096	0.073	0.023	9.630
	MIDALE (NON-UNIT)	5.799	12.40	0.00	12.40	0.719	0.000	0.719	0.550	0.169	92.464

OIL IN PLACE M3/M3	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	WATER SATURATION CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M3	AVERAGE DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL	PRODUCING HORIZON
0.070	260	12.70	13.0	40.0	1.111	846	974	MISSISSIPPIAN	1958	FRYS	TILSTON-SOURIS VALLEY
0.070	243	6.40	11.5	30.0	1.149	858	1072	MISSISSIPPIAN	1956	GAINSBOROUGH	FROBISHER-ALIDA (VOL UNIT)
0.077	444	6.92	12.6	30.0	1.149	865	--	MISSISSIPPIAN	--		FROBISHER-ALIDA (NON-UNIT)
0.049	356	5.60	10.1	35.0	1.333	818	1304	MISSISSIPPIAN	1954	GLEN EWEN	FROBISHER
0.067	4209	2.13	13.7	35.0	1.333	828	1280	MISSISSIPPIAN	1954	GLEN EWEN	MIDALE (UNIT)
0.068	81	4.80	14.0	35.0	1.333	826	--	MISSISSIPPIAN	--		MIDALE (NON-UNIT)
0.073	502	6.49	14.8	37.0	1.276	833	1200	MISSISSIPPIAN	1955	HASTINGS	FROBISHER (UNIT)
0.067	1105	6.37	13.7	35.0	1.333	--	--	MISSISSIPPIAN	--		FROBISHER (VOL UNIT NO. 1)
0.097	971	6.10	19.6	37.0	1.276	843	--	MISSISSIPPIAN	--		FROBISHER (VOL UNIT NO. 2)
0.050	2168	10.90	11.0	40.0	1.333	842	--	MISSISSIPPIAN	--		FROBISHER (NON-UNIT)
0.039	500	9.20	8.1	35.0	1.333	837	1147	MISSISSIPPIAN	1956	HASTINGS EAST	FROBISHER
0.069	210	11.70	12.7	40.0	1.111	848	1149	MISSISSIPPIAN	1963	HAZELWOOD	TILSTON
0.066	130	10.41	12.7	35.0	1.250	880	1935	MISSISSIPPIAN	1964	HOFFER	RATCLIFFE LOWER POOL
0.063	484	4.80	12.1	35.0	1.250	876	1927	MISSISSIPPIAN	1964	HOFFER	RATCLIFFE UPPER POOL
0.062	209	9.10	10.3	28.7	1.186	830	2326	DEVONIAN	1966	HUMMINGBIRD	BIRDBEAR (VOLUNTARY UNIT NO. 1)
0.079	1214	8.69	13.0	30.0	1.155	865	1089	MISSISSIPPIAN	1955	INGOLDSBY	FROBISHER-ALIDA (VOL UNIT)
0.069	433	9.00	11.4	30.0	1.155	850	--	MISSISSIPPIAN	--		FROBISHER-ALIDA (NON-UNIT)
0.083	996	4.90	16.0	35.0	1.250	848	1196	MISSISSIPPIAN	1958	KENOSEE	TILSTON (VOLUNTARY UNIT)
0.076	243	8.50	12.0	25.0	1.186	845	1626	DEVONIAN	1968	KISBEY	BIRDBEAR
0.076	275	4.00	14.0	40.0	1.111	843	1058	MISSISSIPPIAN	1957	LIGHTNING	TILSTON
0.067	413	9.60	12.1	40.0	1.080	864	1188	MISSISSIPPIAN	1960	MOOSE MOUNTAIN	TILSTON
0.071	194	4.50	13.6	35.0	1.250	843	1266	MISSISSIPPIAN	1967	MORRISVIEW	FROBISHER-ALIDA
0.059	233	5.50	12.2	35.0	1.333	827	1152	MISSISSIPPIAN	1965	NORTH ANTLER	MIDALE (VOLUNTARY UNIT NO. 1)
0.025	129	6.90	5.1	35.0	1.333	843	1585	MISSISSIPPIAN	1963	NORTHGATE	FROBISHER
0.044	1456	4.84	15.6	57.0	1.529	--	1575	MISSISSIPPIAN	--	NORTHGATE	MIDALE (VOLUNTARY UNIT)
0.037	16	3.80	14.3	60.0	1.531	837	--	MISSISSIPPIAN	1963		MIDALE (NON UNIT)
0.087	1182	9.14	16.9	31.2	1.335	839	1066	MISSISSIPPIAN	1956	NOTTINGHAM	ALIDA (NORTH ALIDA BEDS UNIT)
0.080	696	6.50	15.5	31.2	1.335	846	--	MISSISSIPPIAN	--		ALIDA (NON-UNIT)
0.049	194	5.60	10.9	40.0	1.333	841	1196	MISSISSIPPIAN	1955	OAKLEY	FROBISHER
0.040	682	5.00	8.9	50.0	1.111	871	1188	MISSISSIPPIAN	1964	PARKMAN	SOURIS VALLEY
0.058	193	6.20	10.8	40.0	1.111	870	1060	MISSISSIPPIAN	1958	PARKMAN	TILSTON
0.058	2986	16.10	10.8	40.0	1.111	862	1097	MISSISSIPPIAN	1959	PARKMAN	TILSTON-SOURIS VALLEY
0.082	162	12.70	15.1	40.0	1.111	841	1096	MISSISSIPPIAN	1969	PARKMAN SOUTH	TILSTON-SOURIS VALLEY
0.040	789	4.60	9.6	45.0	1.333	848	1631	MISSISSIPPIAN	1957	PINTO	FROBISHER
0.053	2525	4.20	14.5	45.0	1.517	873	1615	MISSISSIPPIAN	1957	PINTO	MIDALE (SOUTH PINTO UNIT)
0.053	3464	4.20	14.5	45.0	1.517	834	--	MISSISSIPPIAN	--		MIDALE (NON-UNIT)
0.040	437	9.80	7.3	35.0	1.182	843	1173	MISSISSIPPIAN	1956	QUEENSDALE EAST	FROBISHER-ALIDA (NORTH CANTAL UNIT)
0.074	2622	7.10	13.5	35.0	1.182	850	--	MISSISSIPPIAN	--		FROBISHER-ALIDA (NON-UNIT)
0.079	220	4.90	16.3	35.0	1.333	851	1174	MISSISSIPPIAN	1959	QUEENSDALE NORTH	ALIDA
0.055	405	10.00	11.2	35.0	1.333	859	1204	MISSISSIPPIAN	1956	QUEENSDALE WEST	ALIDA
0.102	247	8.70	21.0	35.0	1.333	843	715	MISSISSIPPIAN	1957	ROCANVILLE	BAKKEN SAND
0.102	166	4.50	14.4	25.0	1.064	823	1822	MISSISSIPPIAN	1956	RONCOTT	BAKKEN SAND
0.065	971	13.70	12.5	30.0	1.343	828	1067	MISSISSIPPIAN	1955	ROSEBANK	FROBISHER-ALIDA (VOL UNIT NO. 1)
0.068	771	15.00	14.2	37.5	1.307	841	--	MISSISSIPPIAN	--		ALIDA (NON-UNIT)
0.055	323	6.80	10.7	35.0	1.266	864	1074	MISSISSIPPIAN	1954	ROSEBANK SOUTH	ALIDA
0.088	511	7.80	15.8	35.0	1.163	880	1240	MISSISSIPPIAN	1963	SHERWOOD	FROBISHER
0.027	131	15.40	5.9	40.0	1.333	854	1204	MISSISSIPPIAN	1956	SILVERTON	FROBISHER
0.097	939	4.30	19.5	45.0	1.111	864	1723	MISSISSIPPIAN	1969	SKINNER LAKE	RATCLIFFE
0.065	712	6.10	13.3	35.0	1.333	861	1334	MISSISSIPPIAN	1965	SOURIS FLAT	FROBISHER
0.070	340	6.30	13.0	40.0	1.111	859	1143	MISSISSIPPIAN	1961	SOUTH FLETWODE	TILSTON
0.073	822	7.30	15.0	35.0	1.333	862	1162	MISSISSIPPIAN	1960	STAR VALLEY	FROBISHER-ALIDA
0.042	363	5.88	9.2	35.0	1.414	833	1409	MISSISSIPPIAN	1954	STEELMAN	FROBISHER (VOL UNIT NO. 1)
0.049	227	7.62	10.1	35.0	1.333	848	--	MISSISSIPPIAN	--		FROBISHER (DOUGLASTON UNIT)
0.050	1534	6.87	10.3	35.0	1.333	849	--	MISSISSIPPIAN	--		FROBISHER (NON-UNIT)
0.080	5463	4.21	17.1	35.0	1.389	843	1399	MISSISSIPPIAN	1954	STEELMAN	MIDALE (UNIT IA)
0.085	2072	9.45	16.5	28.8	1.389	858	--	MISSISSIPPIAN	--		MIDALE (UNIT II)
0.088	2833	4.57	18.9	35.0	1.389	827	--	MISSISSIPPIAN	--		MIDALE (UNIT III)
0.077	5277	3.29	16.4	35.0	1.389	824	--	MISSISSIPPIAN	--		MIDALE (UNIT IV)
0.070	2833	3.26	14.9	35.0	1.389	837	--	MISSISSIPPIAN	--		MIDALE (UNIT V)
0.073	6685	5.12	15.5	35.0	1.389	843	--	MISSISSIPPIAN	--		MIDALE (UNIT VI)
0.084	728	4.20	17.9	35.0	1.389	870	--	MISSISSIPPIAN	--		MIDALE (UNIT VII)
0.059	826	4.00	12.6	35.0	1.389	--	--	MISSISSIPPIAN	--		MIDALE (DOUGLASTON UNIT)
0.092	437	2.30	18.6	31.2	1.389	862	--	MISSISSIPPIAN	--		MIDALE (LAMPMAN UNIT)
0.049	971	4.10	10.0	32.0	1.389	--	--	MISSISSIPPIAN	--		MIDALE (NORTH VOL UNIT NO. 1)
0.056	534	6.10	12.3	37.0	1.389	--	--	MISSISSIPPIAN	--		MIDALE (NORTH VOL UNIT NO. 2)
0.049	2837	4.20	10.4	35.0	1.389	846	--	MISSISSIPPIAN	--		MIDALE (NON-UNIT)

POOL	PRODUCING HORIZON	ORIGINAL OIL IN PLACE MILLION M3	ESTIMATED RECOVERY PER CENT			INITIAL RESERVES MILLION CUBIC METRES			CUMULATIVE PRODUCTION DEC 31/85	REMAINING RESERVES	1985 PROD. 1000 M3
			PRIMARY	ENHANCED	TOTAL	PRIMARY	ENHANCED	TOTAL			
STORTHOAKS	ALIDA-TILSTON	3.514	20.80	0.00	20.80	0.731	0.000	0.731	0.619	0.112	12.063
VIEWFIELD	FROBISHER (VOLUNTARY UNIT NO. 1)	1.479	12.30	0.00	12.30	0.182	0.000	0.182	0.149	0.033	13.801
	FROBISHER (NON-UNIT)	4.802	16.70	0.00	16.70	0.802	0.000	0.802	0.511	0.291	33.738
WARMLEY	ALIDA (FLETWODE ALIDA VOL UNIT)	0.548	38.50	0.00	38.50	0.211	0.000	0.211	0.131	0.080	4.919
WAUCHOPE	ALIDA-TILSTON	1.580	10.00	0.00	10.00	0.158	0.000	0.158	0.055	0.103	29.230
WHITE BEAR	TILSTON	3.284	40.30	0.00	40.30	1.323	0.000	1.323	0.920	0.403	28.567
WHITE BEAR	TILSTON-SOURIS VALLEY	0.477	17.20	0.00	17.20	0.082	0.000	0.082	0.077	0.005	1.522
WILDWOOD	ALIDA	1.253	11.80	0.00	11.80	0.148	0.000	0.148	0.124	0.024	3.988
WILLMAR	FROBISHER-ALIDA (VOL UNIT NO. 1)	3.554	17.00	12.00	29.00	0.604	0.426	1.031	0.888	0.143	18.629
	FROBISHER-ALIDA (N CENTRAL VOL UNIT)	1.226	14.00	4.50	18.50	0.172	0.055	0.227	0.210	0.017	3.713
	FROBISHER-ALIDA (N DALES UNIT NO. 1)	1.149	35.00	13.50	48.50	0.402	0.155	0.557	0.502	0.055	7.817
	FROBISHER-ALIDA (KISBEY SD VOL UNIT)	0.256	48.00	0.00	48.00	0.123	0.000	0.123	0.117	0.006	1.505
	FROBISHER-ALIDA (NON-UNIT)	11.511	29.50	0.50	30.00	3.396	0.058	3.453	2.771	0.682	78.201
WINMORE	FROBISHER	0.500	8.50	0.00	8.50	0.043	0.000	0.043	0.028	0.015	1.067
WORKMAN	FROBISHER (VOLUNTARY UNIT NO. 1)	5.035	16.70	19.40	36.10	0.841	0.977	1.818	1.634	0.184	25.772
	FROBISHER (NON-UNIT)	6.125	26.40	0.00	26.40	1.617	0.000	1.617	1.047	0.570	57.021
WORKMAN	MIDALE (VOLUNTARY UNIT NO. 1)	1.033	17.80	6.20	24.00	0.184	0.064	0.248	0.245	0.003	1.885
	MIDALE (VOLUNTARY UNIT NO. 2)	0.826	10.60	10.80	21.40	0.088	0.089	0.177	0.158	0.019	2.188
	MIDALE (NON-UNIT)	1.173	11.00	1.50	12.50	0.129	0.018	0.147	0.143	0.004	2.291
MISCELLANEOUS	ALIDA	3.919	9.40	0.00	9.40	0.368	0.000	0.368	0.181	0.187	21.377
	ALIDA TILSTON	0.053	1.50	0.00	1.50	0.001	0.000	0.001	0.000	0.001	0.000
	BAKKEN	1.443	15.50	0.00	15.50	0.224	0.000	0.224	0.059	0.165	8.730
	BIRDBEAR	0.066	20.10	0.00	20.10	0.013	0.000	0.013	0.009	0.004	1.157
	FROBISHER	27.824	4.50	0.00	4.50	1.252	0.000	1.252	0.412	0.840	110.954
	FROBISHER-ALIDA	3.796	13.40	0.00	13.40	0.509	0.000	0.509	0.354	0.155	26.285
	LOWER WATROUS	0.074	11.00	0.00	11.00	0.008	0.000	0.008	0.002	0.006	1.301
	MIDALE	4.191	7.40	0.00	7.40	0.310	0.000	0.310	0.143	0.167	27.843
	RATCLIFFE	1.171	5.60	0.00	5.60	0.066	0.000	0.066	0.050	0.016	3.192
	RED RIVER	0.901	6.90	0.00	6.90	0.062	0.000	0.062	0.049	0.013	2.867
	SOURIS VALLEY	5.127	1.60	0.00	1.60	0.082	0.000	0.082	0.037	0.045	10.702
	TILSTON	4.624	4.90	0.00	4.90	0.227	0.000	0.227	0.094	0.133	19.910
	TILSTON-SOURIS VALLEY	1.383	2.30	0.00	2.30	0.032	0.000	0.032	0.021	0.011	3.493
	WINNIPEGOSIS	0.090	9.00	0.00	9.00	0.008	0.000	0.008	0.000	0.008	0.000
	YEOMENS	0.422	5.70	0.00	5.70	0.024	0.000	0.024	0.020	0.004	0.887
	TOTAL AREA IV LIGHT	498.970				95.524	34.518	130.043	102.899	27.144	2703.422
	PROVINCIAL TOTAL	2845.410				280.530	154.086	434.617	322.690	111.927	11582.969

OIL IN PLACE M3/M3	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	WATER SATURATION CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M3	AVERAGE DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL	PRODUCING HORIZON
0.083	664	6.40	14.3	35.0	1.124	842	1066	MISSISSIPPIAN	1962	STORTHOAKS	ALIDA-TILSTON
0.067	129	17.10	12.0	35.0	1.163	873	1270	MISSISSIPPIAN	1969	VIEWFIELD	FROBISHER (VOLUNTARY UNIT NO. 1)
0.062	291	26.60	11.1	35.0	1.163	838	--	MISSISSIPPIAN	--		FROBISHER (NON-UNIT)
0.062	401	2.20	11.8	40.0	1.140	860	1242	MISSISSIPPIAN	1966	WARMLEY	ALIDA (FLETWODE ALIDA VOL UNIT)
0.108	243	6.00	20.3	40.0	1.124	852	1140	MISSISSIPPIAN	1980	WAUCHOPE	ALIDA-TILSTON
0.069	360	13.30	12.7	40.0	1.111	862	1060	MISSISSIPPIAN	1957	WHITE BEAR	TILSTON
0.060	146	5.40	11.2	40.0	1.111	853	1189	MISSISSIPPIAN	1963	WHITE BEAR	TILSTON-SOURIS VALLEY
0.070	210	8.50	14.4	35.0	1.333	852	1184	MISSISSIPPIAN	1966	WILDWOOD	ALIDA
0.074	809	5.90	12.9	26.0	1.282	843	1249	MISSISSIPPIAN	1957	WILLMAR	FROBISHER-ALIDA (VOL UNIT NO. 1)
0.060	324	6.30	11.0	30.0	1.282	843	--	MISSISSIPPIAN	--		FROBISHER-ALIDA (N CENTRAL VOL UNIT)
0.050	388	5.90	9.9	35.0	1.282	--	--	MISSISSIPPIAN	--		FROBISHER-ALIDA (N DALES UNIT NO. 1)
0.093	61	3.40	20.0	40.0	1.293	--	--	MISSISSIPPIAN	--		FROBISHER-ALIDA (KISBEY SD VOL UNIT)
0.070	2476	6.60	12.9	30.0	1.282	861	--	MISSISSIPPIAN	--		FROBISHER-ALIDA (NON-UNIT)
0.045	259	4.30	9.5	45.0	1.163	869	1140	MISSISSIPPIAN	1968	WINMORE	FROBISHER
0.064	1748	4.50	13.1	42.1	1.185	844	1237	MISSISSIPPIAN	1959	WORKMAN	FROBISHER (VOLUNTARY UNIT NO. 1)
0.051	2458	4.90	10.4	42.1	1.184	861	--	MISSISSIPPIAN	--		FROBISHER (NON-UNIT)
0.081	671	1.90	14.8	35.0	1.187	838	1230	MISSISSIPPIAN	1960	WORKMAN	MIDALE (VOLUNTARY UNIT NO. 1)
0.075	356	3.10	15.7	39.3	1.274	--	--	MISSISSIPPIAN	--		MIDALE (VOLUNTARY UNIT NO. 2)
0.076	501	3.10	14.8	35.0	1.274	844	--	MISSISSIPPIAN	--		MIDALE (NON-UNIT)
0.057	1004	6.90	11.6	35.0	1.333	843	--	MISSISSIPPIAN	--	MISCELLANEOUS	ALIDA
0.078	32	2.13	15.9	35.0	1.333	843	--	MISSISSIPPIAN	--		ALIDA TILSTON
0.103	425	3.30	14.6	25.0	1.064	819	--	MISSISSIPPIAN	--		BAKKEN
0.083	32	2.50	13.0	25.0	1.176	838	--	DEVONIAN	--		BIRDBEAR
0.053	4759	11.00	10.9	35.0	1.333	843	--	MISSISSIPPIAN	--		FROBISHER
0.059	874	7.30	12.2	35.0	1.333	858	--	MISSISSIPPIAN	--		FROBISHER-ALIDA
0.076	49	2.00	15.3	45.0	1.111	--	--	MISSISSIPPIAN	--		LOWER WATROUS
0.051	1153	7.10	10.5	35.0	1.333	838	--	MISSISSIPPIAN	--		MIDALE
0.059	243	8.10	12.2	35.0	1.333	--	--	MISSISSIPPIAN	--		RATCLIFFE
0.034	194	13.80	6.9	35.0	1.333	853	--	ORDOVICIAN	--		RED RIVER
0.051	705	14.30	11.3	50.0	1.111	858	--	MISSISSIPPIAN	--		SOURIS VALLEY
0.066	916	7.60	12.3	40.0	1.111	849	--	MISSISSIPPIAN	--		TILSTON
0.050	266	10.50	11.0	50.0	1.111	843	--	MISSISSIPPIAN	--		TILSTON-SOURIS VALLEY
0.035	65	3.96	6.7	35.0	1.250	--	--	DEVONIAN	--		WINNIPEGOSIS
0.045	65	14.33	9.3	35.0	1.333	--	--	ORDOVICIAN	--		YEOMENS
											TOTAL AREA IV LIGHT
											PROVINCIAL TOTAL

RESERVOIR DATA RESERVES AND PRODUCTION–GAS

FIVE YEAR GAS SUMMARY

	1981	1982	1983	1984	1985
	INITIAL ESTABLISHED RESERVES (MILLION CUBIC METRES)				
Non-Associated	62 488.8	66 701.8	73 224.3	84 415.1	90 680.8
Associated	1 633.3	1 633.3	1 683.5	1 683.5	1 822.6
Dissolved	5 756.5	5 756.5	5 756.5	5 972.5	6 535.2
PROVINCIAL TOTAL	69 878.2	74 091.6	80 664.3	92 071.1	99 038.6
	REMAINING ESTABLISHED RESERVES (MILLION CUBIC METRES)				
Non-Associated	38 324.1	41 289.0	46 661.8	56 407.4	61 008.9
Associated	791.5	790.0	838.9	837.4	942.9
Dissolved	1 103.3	1 054.5	966.5	994.2	1 316.1
PROVINCIAL TOTAL	40 218.9	43 133.5	48 467.2	58 239.0	63 267.9
	YEARLY PRODUCTION (MILLION CUBIC METRES)				
Non-Associated	1 168.8	1 202.1	1 134.1	1 445.2	1 657.4
Associated	3.1	1.4	1.4	1.3	33.6
Dissolved	40.3	48.8	88.0	188.3	240.8
PROVINCIAL TOTAL	1 212.2	1 252.3	1 223.5	1 634.8	1 931.8
	NUMBER OF PRODUCING WELLS				
Non-Associated	756	769	919	1 040	1 545
Associated	5	6	7	7	15
PROVINCIAL TOTAL	761	775	926	1 047	1 560
	AVERAGE DAILY PRODUCTION (MILLION CUBIC METRES)				
Non-Associated	3.813	3.880	3.497	3.959	4.541
Associated	0.036	0.006	0.005	0.004	0.092
Dissolved	0.110	0.133	0.241	0.516	0.659
PROVINCIAL TOTAL	3.959	4.019	3.743	4.479	5.292

Temperature Base 15 °C
Pressure Base 101.325 kPa

Pool Producing Horizon	Initial Gas in Place Million Cubic Metres	Reservoir Recovery Per Cent	Surface Losses Per Cent	Initial Established Reserves Million Cubic Metres	Cummulative Production Dec 31/85 Million Cubic Metres	Remaining Reserves Dec 31/85 Million Cubic Metres	Estimated Heating Value MAJ/M3
NON-ASSOCIATED GAS RESERVES							
BAYHURST							
Viking Voluntary Unit	2 567.7	80	5	1 951.4	1 858.5	92.9	37.4
BAYHURST WEST							
Viking Voluntary Unit	304.7	75	5	217.1	180.9	36.2	35.6
BEACON HILL							
Mannville	4 541.7	85	5	3 667.4	1 587.8	2 079.6	35.6
BEACON HILL WEST							
Mannville Sand	1 726.9	80	5	1 312.4	40.6	1 271.8	35.9
BEVERLEY EAST							
Cantuar Sand Voluntary Unit	378.0	90	5	323.2	217.7	105.5	36.9
BIGSTICK							
Second White Specks	8 319.5	65	5	5 137.3	287.9	4 849.4	35.6
BROCK							
Viking Unit	765.2	78	5	567.0	557.9	9.1	36.3
BROCK EAST							
Viking Sand	310.0	35	5	103.1	10.7	92.4	34.6
BURSTALL							
Medicine Hat Sand	450.1	80	5	342.1	1.9	461.0	35.4
Milk River	235.1	65	5	145.2	2.6		35.4
Milk River-Medicine Hat					21.8		
BURSTALL NORTH							
Viking Sand	146.8	80	5	111.5	9.0	102.5	35.6
CAVALIER							
Spinney Hill Sand	120.0	80	5	92.1	75.8	16.3	32.4
COLEVILLE-SMILEY							
Viking Unit	6 978.7	85	5	5 635.3	4 916.8	718.5	38.4
Viking Non-Unit	58.4	80	5	44.4	31.9	12.5	38.3
DODSLAND NORTH							
Viking Unit	843.4	80	5	640.7	443.6	197.1	40.7
Viking Non-Unit	2 163.0	65	5	1 335.7	72.9	1 262.8	40.7
FORT PITT							
Mannville Sand	1 187.7	80	5	902.7	40.4	862.3	35.9
FORT PITT NORTH							
Mannville Sand	262.9	80	5	199.8	77.5	122.3	37.0
GLIDDEN							
Viking Voluntary Unit #1	484.0	50	5	229.9	79.4	150.5	35.8
GREENAN							
Viking Sand	1 347.9	30	5	384.2	305.8	78.4	35.2
GULL LAKE							
Cantuar Sand	999.9	70	5	664.9	481.3	183.6	38.4
HATTON							
Medicine Hat Sand (Unit)	6 871.3	80	5	5 222.2	4 014.5	1 207.7	35.4
Medicine Hat Sand (Agreement Area)	1 969.2	80	5	1 496.6	683.9	812.7	35.4
Medicine Hat Sand (Non-Unit)	6 910.4	80	5	5 251.9	1 762.6	23 533.8	35.4
Milk River	39 887.6	65	5	24 630.6	3 520.7		
Milk River - Medicine Hat	-	-	-	-	1 065.4		

1985 PRODUCTION YEARLY TOTAL MILLION CUBIC METRES	DAILY AVERAGE MILLION CUBIC METRES/DAY	DEVELOPED AREA HECTARES	AVERAGE NET PAY METRES	AVERAGE POROSITY PER CENT	AVERAGE CONNATE WATER PER CENT	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL PRODUCING HORIZON
										NON-ASSOCIATED GAS RESERVES
										BAYHURST
42.617	0.294	8 903	2.71	25.0	35.0	0.580	661	Cretaceous	1958	Viking Sand (Voluntary Unit)
										BAYHURST WEST
1.746	0.015	1 333	1.62	30.5	35.0	0.580	696	Cretaceous	1968	Viking Sand (Voluntary Unit)
										BEACON HILL
13.829	0.163	21 107	4.66	35.0	40.0	0.568	274	Cretaceous	1963	Mannville Sand
										BEACON HILL WEST
33.597	0.203	2 849	5.44	35.0	40.0	0.573	310	Cretaceous	1978	Mannville Sand
										BEVERLEY EAST
9.337	0.028	874	2.53	28.1	33.0	0.583	972	Cretaceous	1965	Cantuar Sand (Vol. Unit No. 1)
										BIGSTICK
149.279	0.406	24 087	3.73	20.4	30.0	0.580	692	Cretaceous	1980	Second White Specks
										BROCK
3.046	0.008	5 698	2.19	14.5	40.0	0.588	716	Cretaceous	1951	Viking Sand (Unit)
										BROCK EAST
0.0	0.0	3 108	0.91	24.0	40.0	0.597	720	Cretaceous	1967	Viking Sand
										BURSTALL
1.639	0.009	2 719.5	2.80	16.0	20.0	0.575	520	Cretaceous	1952	Medicine Hat
2.354	0.013	2 719.5	2.61	16.0	45.0	0.574	460	Cretaceous		Milk River
19.409	0.107									Milk River-Medicine Hat
										BURSTALL NORTH
8.006	0.044	777.0	1.57	28.0	45.0	0.580	748	Cretaceous	1973	Viking Sand
										CAVALIER
11.619	0.032	1 518	1.22	25.0	30.0	0.620	400	Cretaceous	1972	Spinney Hill Sand
										COLEVILLE-SMILEY
72.291	0.198	20 979	3.05	22.5	32.0	0.600	686	Cretaceous	1951	Viking Sand (Unit)
0.806	0.002	226	2.44	25.5	32.0	0.608	--	--	--	Viking Sand (Non-Unit)
										DODSLAND NORTH
14.685	0.050	4 452	2.01	22.4	35.0	0.615	669	Cretaceous	1953	Viking Sand (Unit)
14.081	0.038	12 756	1.80	22.4	35.0	0.621	--	--	--	Viking Sand (Non-Unit)
										FORT PITT
20.038	0.080	4 890	4.17	34.0	40.0	0.578	388	Cretaceous	1972	Mannville Sand
										FORT PITT NORTH
31.594	0.127	1 457	3.02	34.0	40.0	0.568	473	Cretaceous	1971	Mannville Sand
										GLIDDEN
5.554	0.031	5 893	0.88	21.0	40.0	0.584	694	Cretaceous	1953	Viking Sand (Voluntary Unit)
										GREENAN
9.156	0.028	5 962	1.98	24.6	35.0	0.596	655	Cretaceous	1969	Viking Sand
										GULL LAKE
1.182	0.003	2 011	3.14	23.0	30.0	0.598	1 057	Cretaceous	1957	Cantuar Sand
										HATTON
76.870	0.211	43 491	3.26	21.0	50.0	0.575	477	Cretaceous	1953	Medicine Hat Sand (Unit)
22.034	0.082	13 727	2.96	21.0	50.0	0.575	--	--	--	Medicine Hat Sand (Agreement Area)
74.438	0.203	58 023	2.82	21.0	50.0	0.575	--	--	--	Medicine Hat Sand (Non Unit)
422.962	1.167	177 674	6.77	16.0	45.0	0.574	335	Cretaceous	--	Milk River
268.325	0.734	--	--	--	--	--	--	--	--	Milk River - Medicine Hat

Temperature Base 15 °C
Pressure Base 101.325 kPa

Pool Producing Horizon	Initial Gas in Place Million Cubic Metres	Reservoir Recovery Per Cent	Surface Losses Per Cent	Initial Established Reserves Million Cubic Metres	Cumulative Production Dec 31/85 Million Cubic Metres	Remaining Reserves Dec 31/85 Million Cubic Metres	Estimated Heating Value MAJ/M3
HOOSIER							
Viking Sand (Unit)	4 643.4	75	5	3 308.4	2 359.2	949.2	37.3
Viking Sand (Voluntary Unit #4)	134.8	75	5	96.1	21.0	75.1	39.2
Viking Sand (Non-Unit)	51.3	75	5	36.6	-	36.6	37.3
LIEBENTHAL							
Milk River	418.9	65	5	258.7	138.0	120.7	35.4
LLOYDMINSTER							
Colony Sand	246.2	95	5	222.2	220.3	1.9	34.4
MARENGO							
Viking Sand	323.7	8	5	246.0	0.6	245.4	36.3
MILTON							
Viking Sand	1 047.2	85	5	845.6	794.4	51.2	37.3
PIERCELAND							
Mannville Sand	1 581.1	93	5	1 396.9	592.8	804.1	36.5
TANGLEFLAGS							
Colony Sand	625.0	75	5	445.3	262.8	182.5	35.9
McLaren Sand	519.3	75	5	370.0	164.9	205.1	35.6
Second White Specks	112.5	75	5	80.2	1.8	78.4	36.1
St. Walburg Sand	123.5	75	5	88.0	16.5	71.5	35.8
TOTNES							
Viking Sand (Voluntary Unit)	465.8	80	5	354.0	288.6	65.4	35.5
Viking Sand (Non-Unit)	155.2	80	5	118.0	1.6	116.4	35.5
UNITY FIELD							
Unity Sand	312.2	90	5	267.0	267.0	0	33.6
Viking Sand	30.2	50	5	14.4	14.4	0	37.4
WHITESIDE							
Victoria Sand (Voluntary Unit)	608.3	85	5	491.2	418.2	73.0	37.4
WHITESIDE WEST							
Viking Sand	872.4	50	5	414.4	23.8	390.6	39.1
MISCELLANEOUS							
Alida	48.9	-	-	39.5	4.8	34.7	39.9
Bakken	3 272.8	-	-	2 402.9	425.4	1 977.5	37.8
Cantuar	224.4	-	-	116.0	57.2	58.8	35.2
Colony	5 760.1	-	-	4 535.9	376.8	4 159.1	34.4
Cummings	6.3	-	-	4.8	4.8	0	36.6
Detrital	814.7	-	-	627.4	-	627.4	38.0
Lloydminster	116.4	-	-	82.7	28.0	54.7	34.4
Mannville	4 833.2	-	-	3 542.3	137.9	3 404.4	37.4
McLaren	1 164.4	-	-	829.6	392.8	436.8	34.4
Medicine Hat	4.7	-	-	4.7	0	4.7	35.4
Milk River	2 004.3	-	-	1 237.6	0	1 237.6	35.9
Rex	95.3	-	-	67.9	6.7	61.2	34.4
Ribstone Creek	193.6	-	-	146.8	12.9	133.9	34.4
Roseray	52.9	-	-	260.5	46.6	213.9	37.4
Second White Specks	4 085.7	-	-	2 686.3	0.4	2 685.9	35.4
Spinney Hill	93.7	-	-	67.6	2.8	64.8	32.0

1985 PRODUCTION										
YEARLY TOTAL MILLION CUBIC METRES	DAILY AVERAGE MILLION CUBIC METRES/DAY	DEVELOPED AREA HECTARES	AVERAGE NET PAY METRES	AVERAGE POROSITY PER CENT	AVERAGE CONNATE WATER PER CENT	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL PRODUCING HORIZON
										HOOSIER
24.355	0.067	12 468	3.32	23.0	32.0	0.600	732	Cretaceous	1953	Viking Sand (Unit)
0	0	697	2.56	23.0	32.0	0.604	--	--	--	Viking Sand (Vol. Unit No. 4)
0	0	129	3.81	23.0	32.0	0.600	--	--	--	Viking Sand (Non Unit)
										LIEBENTHAL
20.109	0.055	5 915	2.03	16.0	45.0	0.578	396	Cretaceous	1974	Milk River
										LLOYDMINSTER
1.922	0.001	1 012	4.16	25.0	30.0	0.568	518	Cretaceous	1935	Colony Sand
										MARENGO
0	0	1 410	1.89	25.0	35.0	0.576	778	Cretaceous	1954	Viking Sand
										MILTON
7.011	0.019	4 897	1.74	25.0	32.0	0.604	732	Cretaceous	1954	Viking Sand
										PIERCELAND
32.388	0.088	3 818	9.27	35.0	40.0	0.564	272	Cretaceous	1969	Mannville Sand
										TANGLEFLAGS
21.667	0.059	999	6.9	33.5	15.0	0.600	488	Cretaceous	1965	Colony Sand
15.554	0.043	1 258	5.2	31.6	25.0	0.591	475	Cretaceous	1965	McLaren Sand
1.779	0.006	1 234	1.5	32.0	40.0	0.591	286	Cretaceous	1965	Second White Specks
16.128	0.044	713	2.5	33.0	40.0	0.581	315	Cretaceous	1965	St. Walburg Sand
										TOTNES
3.313	0.015	1 554	2.71	25.0	40.0	0.584	613	Cretaceous	1969	Viking Sand (Voluntary Unit)
0.120	0.002	518	2.71	25.0	40.0	0.584	--	--	--	Viking Sand (Non Unit)
										UNITY FIELD
0	0	2 161	4.88	26.0	20.0	0.600	632	Cretaceous	1944	Unity Sand
0	0	1 042	1.52	21.6	35.0	0.600	503	Cretaceous	1945	Viking Sand
										WHITESIDE
10.399	0.034	2 987	4.11	35.0	30.0	0.568	229	Cretaceous	1962	Victoria Sand (Voluntary Unit)
										WHITESIDE WEST
3.643	0.010	3 980	2.22	27.8	32.0	0.578	724	Cretaceous	1956	Viking Sand
										MISCELLANEOUS
0	0	129	--	--	--	--	--	Mississippian	--	Alida
13.678	0.037	1 926	--	--	--	--	--	Mississippian	--	Bakken
1.224	0.004	682	--	--	--	--	--	Cretaceous	--	Cantuar
71.490	0.195	8 033	--	--	--	--	--	Cretaceous	--	Colony
		32	--	--	--	--	--	Cretaceous	--	Cummings
--	--	--	--	--	--	--	--	Pre-Cretaceous	--	Detrital
11.461	0.031	131	--	--	--	--	--	Cretaceous	--	Lloydminster
6.335	0.017	2 150	--	--	--	--	--	Cretaceous	--	Mannville
42.553	0.115	4 125	--	--	--	--	--	Cretaceous	--	McLaren
0	0	--	--	--	--	--	--	Cretaceous	--	Medicine Hat
0	0	259	--	--	--	--	--	Cretaceous	--	Milk River
1.536	0.004	294	--	--	--	--	--	Cretaceous	--	Rex
12.191	0.031	--	--	--	--	--	--	Cretaceous	--	Ribstone Creek
--	--	1 708	--	--	--	--	--	Cretaceous	--	Roseray
0.340	0.011	3 367	--	--	--	--	--	Cretaceous	--	Second White Specks
2.395	0.007	--	--	--	--	--	--	Cretaceous	--	Spinney Hill

Temperature Base 15 °C
Pressure Base 101.325 kPa

Pool Producing Horizon	Initial Gas in Place Million Cubic Metres	Reservoir Recovery Per Cent	Surface Losses Per Cent	Initial Established Reserves Million Cubic Metres	Cummulative Production Dec 31/85 Million Cubic Metres	Remaining Reserves Dec 31/85 Million Cubic Metres	Estimated Heating Value MAJ/M3
St. Walburg	417.8	-	-	318.6	1.3	317.3	35.2
Upper Shaunavon	525.9	-	-	374.5	0.6	373.9	36.0
Viking	6 091.8	-	-	3 606.3	233.5	3 372.8	37.4
Waseca	94.3	-	-	67.2	3.7	63.5	34.2
TOTAL NON-ASSOCIATED	132 002.0			90 680.8	29 671.9	61 008.9	
ASSOCIATED GAS RESERVES							
ABERFELDY							
Sparky Sand	125.4	80	5	95.3	62.7	32.6	34.4
ALIDA EAST							
Alida	833.4	45	5	356.3	160.7	195.6	45.0
ALIDA WEST							
Alida	81.9	85	5	66.1	--	66.1	45.0
AVON HILL							
Viking Sand	10.6	80	5	8.1	--	8.1	37.4
BUFFALO COULEE							
Bakken Sand	3.5	60	5	2.0	2.0	--	37.2
CANTUAR EAST							
Cantuar Sand	914.1	90	3	798.0	569.3	228.7	37.4
COSINE LAKE							
Lloydminster Sand	89.5	80	5	68.0	21.4	46.6	34.4
DEE VALLEY							
Waseca Sand	75.5	70	5	50.2	--	50.2	37.2
EPPING							
Sparky Sand	9.8	80	5	7.4	2.6	4.8	34.4
EUREKA							
Viking Sand	12.5	80	5	9.5	8.1	1.4	40.7
HOOSIER							
Bakken Sand	63.1	90	5	53.9	11.5	42.4	37.9
LASHBURN							
Waseca Sand	11.3	80	5	8.6	3.1	5.5	34.4
LONE ROCK							
Sparky Sand	2.5	80	5	1.9	0.2	1.7	34.4
MARSDEN SOUTH							
Sparky Vol Unit 1	93.6	80	5	71.1	11.1	60.0	34.4
NORTH HOOSIER							
Bakken Sand	11.0	85	5	8.9	4.0	4.9	37.7
NOTTINGHAM							
Alida	211.2	90	5	180.6	--	180.6	45.0
SILVERDALE							
Sparky Sand	27.2	80	5	21.0	12.4	8.6	34.4

1985 PRODUCTION										
YEARLY TOTAL MILLION CUBIC METRES	DAILY AVERAGE MILLION CUBIC METRES/DAY	DEVELOPED AREA HECTARES	AVERAGE NET PAY METRES	AVERAGE POROSITY PER CENT	AVERAGE CONNATE WATER PER CENT	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL PRODUCING HORIZON
1.336	0.004	--	--	--	--	--	--	Cretaceous	--	St. Walburg
0	0	--	--	--	--	--	--	Jurassic	--	Upper Shaunavon
2.156	0.006	2 067	--	--	--	--	--	Cretaceous	--	Viking
1.857	0.005	--	--	--	--	--	--	Cretaceous	--	Waseca
1 657.434	5.186									TOTAL NON-ASSOCIATED
										ASSOCIATED GAS RESERVES
										ABERFELDY
--	--	678	2.44	25.0	30.0	0.595	529	Cretaceous	1958	Sparky Sand
										ALIDA EAST
--	--	--	5.79	--	--	0.700	1 116	Mississippian	1954	Alida
										ALIDA WEST
--	--	--	3.05	--	--	0.700	1 137	Mississippian	1955	Alida
										AVON HILL
--	--	40	2.13	25.0	30.0	0.600	678	Cretaceous	1959	Viking Sand
										BUFFALO COULEE
--	--	8	3.05	23.0	25.0	0.565	808	Mississippian	1953	Bakken Sand
										CANTUAR EAST
--	--	1 127	8.69	25.6	41.0	0.599	960	Cretaceous	1957	Cantuar Sand
										COSINE LAKE
11.275	0.031	483	1.53	30.0	35.0	0.600	770	Cretaceous		Lloydminster Sand
										DEE VALLEY
--	--	663	1.50	30.0	30.0	0.597	460	Cretaceous	1967	Waseca Sand
										EPPING
--	--	65	2.44	25.0	20.0	0.609	610	Cretaceous	1967	Sparky Sand
										EUREKA
0.253	0.001	65	2.01	22.4	35.0	0.622	689	Cretaceous	1954	Viking Sand
										HOOSIER
0.742	0.002	142	2.44	25.0	36.0	0.576	852	Mississippian	1972	Bakken Sand
										LASHBURN
--	--	129	4.51	25.0	30.0	0.592	498	Cretaceous	1966	Waseca Sand
										LONE ROCK
--	--	16	2.44	25.0	30.0	0.600	560	Cretaceous	1947	Sparky Sand
										MARSDEN SOUTH
11.109	0.030	518	2.04	30.0	35.0	0.600	625	Cretaceous	1979	Sparky Vol. Unit 1
										NORTH HOOSIER
--	--	83	1.52	20.0	25.0	0.600	831	Mississippian	1960	Bakken Sand
										NOTTINGHAM
--	--	--	6.10	--	--	0.700	1 061	Mississippian	1956	Alida
										SILVERDALE
--	--	129	3.05	25.0	30.0	0.596	573	Cretaceous	1965	Sparky Sand

Temperature Base 15 °C
Pressure Base 101.325 kPa

Pool Producing Horizon	Initial Gas in Place Million Cubic Metres	Reservoir Recovery Per Cent	Surface Losses Per Cent	Initial Established Reserves Million Cubic Metres	Cummulative Production Dec 31/85 Million Cubic Metres	Remaining Reserves Dec 31/85 Million Cubic Metres	Estimated Heating Value MAJ/M3
SMILEY-DEWAR							
Viking Sand	15.7	80	5	11.9	7.6	4.3	38.3
TANGLEFLAGS							
Sparky Sand	4.7	85	5	3.8	3.0	0.8	34.4
TOTAL ASSOCIATED	2 596.5			1 822.6	879.7	942.9	
DISSOLVED GAS RESERVES							
Area II				1328.5	724.5	604.0	
Area III				373.0	354.9	18.1	
Area IV				4 833.7	4 139.7	694.0	
TOTAL DISSOLVED				6 535.2	5 219.1	1 316.1	
PROVINCIAL TOTAL GAS RESERVES				99 038.6	35 770.7	63 267.9	

1985 PRODUCTION YEARLY TOTAL MILLION CUBIC METRES	1985 PRODUCTION DAILY AVERAGE MILLION CUBIC METRES/DAY	DEVELOPED AREA HECTARES	AVERAGE NET PAY METRES	AVERAGE POROSITY PER CENT	AVERAGE CONNATE WATER PER CENT	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	PRODUCING SYSTEM	YEAR DISCOVERED	POOL PRODUCING HORIZON
										SMILEY-DEWAR
0.149	0.001	65	2.29	25.5	32.0	0.608	694	Cretaceous	1973	Viking Sand
										TANGLEFLAGS
--	--	24	3.05	25.0	30.0	0.595	511	Cretaceous	1969	Sparky Sand
23.528	0.065									TOTAL ASSOCIATED
										DISSOLVED GAS RESERVES
163.6	0.448									Area II
--	--									Area III
77.2	0.211									Area IV
240.8	0.659									TOTAL DISSOLVED
1 931.8	5.292									PROVINCIAL TOTAL GAS RESERVES

OIL AND GAS UNITS
AND ENHANCED
RECOVERY PROJECTS

OIL AND GAS UNITS - ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	EFFECTIVE DATE	LATEST BOUNDARY REVISION	PROJECTS
AREA I					
ABERFELDY UNIT	HUSKY	SPARKY	12-1-62	5-1-66	WATERFLOOD (SUSPENDED) IN-SITU WET COMBUSTION STEAMFLOOD
BIG GULLY VOLUNTARY UNIT NO. 1	HUSKY	WASECA & MCLAREN	10-1-70	1-1-71	WATERFLOOD (SUSPENDED)
GOLDEN LAKE VOLUNTARY UNIT	HUSKY	SPARKY & WASECA	1-1-71	11-1-71	WATERFLOOD (SUSPENDED)
GULLY LAKE WASECA VOLUNTARY UNIT NO. 1	HUSKY	WASECA	8-1-71	--	WATERFLOOD
LASHBURN WASECA VOLUNTARY UNIT	HUSKY	WASECA	4-1-68	6-1-71	WATERFLOOD (SUSPENDED)
MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1	SASKOIL	SPARKY	12-1-85	--	WATERFLOOD
NORTH DULWICH SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	10-1-70	--	WATERFLOOD
NORTHMINSTER SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	3-1-70	9-1-70	WATERFLOOD (SUSPENDED)
SOUTH ABERFELDY SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	6-1-69	5-1-70	WATERFLOOD
SOUTH EPPING UNIT NO. 1	TEXACO	SPARKY & G.P.	2-1-66	9-1-67	WATERFLOOD
SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1	TEXACO	SPARKY	1-1-72	7-1-73	WATERFLOOD
TANGLEFLAGS VOLUNTARY UNIT NO. 2	DOME	LLOYDMINSTER	3-1-81	--	WATERFLOOD
TANGLEFLAGS VOLUNTARY UNIT NO. 3	MOBIL	G.P., MCLAREN & LLOYDMINSTER	2-1-81	--	--
AREA II					
AVON HILL VIKING VOLUNTARY UNIT	JCIP	VIKING	8-1-85	--	WATERFLOOD
BAYHURST VIKING VOLUNTARY GAS UNIT	SPC	VIKING	11-1-66	--	GAS STORAGE
BROCK VIKING SAND GAS UNIT	HUSKY	VIKING	3-1-54	--	--
COLEVILLE-SMILEY VIKING SAND GAS UNIT	ESSO RESOURCES	VIKING	7-1-55	4-1-72	--
DODSLAND VIKING GAS VOLUNTARY UNIT	DOME	VIKING	11-1-67	1-1-70	--
EAGLE LAKE VIKING VOLUNTARY UNIT	ESSO RESOURCES	VIKING	10-1-66	--	WATERFLOOD
EAST DODSLAND VIKING VOLUNTARY UNIT	PAGE	VIKING	9-1-85	--	WATERFLOOD
GLENEATH UNIT	ERSKINE	VIKING	6-1-66	10-1-67	WATERFLOOD
GLENEATH SOUTH VIKING VOLUNTARY UNIT	ULTRAMAR	VIKING	9-1-85	--	WATERFLOOD
GLIDDEN VIKING GAS VOLUNTARY UNIT NO. 1	WESTAR	VIKING	9-1-72	--	--
HOOSIER BAKKEN SAND VOL. UNIT NO. 1	DOME	BAKKEN	3-1-81	--	WATERFLOOD
HOOSIER VIKING SAND GAS UNIT	UNITED CANSO	VIKING	8-1-57	--	--
KIYIU LAKE VIKING VOLUNTARY UNIT	JCIP	VIKING	12-1-85	--	--
LUCKY HILLS VIKING SAND VOLUNTARY GAS UNIT	ULTRAMAR	VIKING	6-1-71	--	--
NORTH DODSLAND VIKING VOLUNTARY UNIT	JCIP	VIKING	6-1-85	--	WATERFLOOD
NORTH EUREKA UNIT	UNITED CANSO	VIKING	9-1-65	12-1-71	WATERFLOOD
NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT	DOME	BAKKEN	7-1-70	8-1-73	WATERFLOOD
NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT	ERSKINE	MANNVILLE	1-1-69	5-1-80	WATERFLOOD
PLATO VIKING VOLUNTARY UNIT NO. 1	TRI LINK	VIKING	4-1-73	--	WATERFLOOD
SMILEY VIKING GAS VOLUNTARY UNIT NO. 4	WESTERN DECALTA	VIKING	6-1-70	--	--
SOUTH EUREKA UNIT	ULTRAMAR	VIKING	4-1-65	9-1-71	WATERFLOOD
TOTNES VIKING GAS VOLUNTARY UNIT NO. 1	ICG RESOURCES	VIKING	1-1-71	--	--
WEST BAYHURST VIKING GAS VOLUNTARY UNIT	ALTEX	VIKING	2-1-72	--	--
WHITESIDE VIKING VOLUNTARY UNIT	JCIP	VIKING	9-1-85	--	WATERFLOOD
WHITESIDE VICTORIA VOLUNTARY GAS UNIT	ULTRAMAR	VICTORIA	1-1-68	--	--
AREA III					
ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT	WESTERN DECALTA	UPPER SHAUNAVON	3-1-75	--	WATERFLOOD
BATTRUM UNIT NO. 1	MOBIL	ROSERAY	10-1-64	6-1-69	WATERFLOOD IN-SITU WET COMBUSTION
BATTRUM UNIT NO. 2	MOBIL	ROSERAY	10-1-64	--	IN-SITU WET COMBUSTION
BATTRUM UNIT NO. 3	MOBIL	ROSERAY	6-1-66	--	WATERFLOOD IN-SITU WET COMBUSTION
BATTRUM UNIT NO. 4	SCEPTRE	ROSERAY	6-1-66	--	WATERFLOOD
BEVERLEY UNIT NO. 1	MOBIL	UPPER & LOWER ROSERAY	5-1-66	--	WATERFLOOD
BONE CREEK UNIT	SASKOIL	UPPER SHAUNAVON	6-1-58	7-1-60	WATERFLOOD

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS PROD.	- INJ	DATE OF FIRST INJECTION	AVERAGE INJECTION RATE M3/DAY	UNIT NAME
						AREA I
MANNVILLE	INV. 9-SPOT & 5-SPOT	171	--	05-64	--	ABERFELDY UNIT
GLACIAL DRIFT	INV. 9-SPOT & 5-SPOT	34	--	07-69	--	
SURFACE WATER	INV. 9-SPOT	38	9	02-81	--	
DINA	5-SPOT		--	10-70	--	BIG GULLY VOLUNTARY UNIT NO. 1
		27	--		--	
DINA	MOD. 9-SPOT		--	04-71	--	GOLDEN LAKE VOLUNTARY UNIT
		65	--		--	
DINA	INV. & MOD. 9-SPOT	28	6	07-71	33	GULLY LAKE WASECA VOLUNTARY UNIT NO. 1
DINA	5-SPOT	46	--		--	LASHBURN WASECA VOLUNTARY UNIT
DINA	INV. 9-SPOT	32	13	12-85	390	MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1
GLACIAL DRIFT	--	6	0	10-70	0	NORTH DULWICH SPARKY VOLUNTARY UNIT
DINA	5-SPOT	38	0	10-70	0	NORTHMINSTER SPARKY VOLUNTARY UNIT
DINA	5-SPOT	64	0	09-69	0	SOUTH ABERFELDY SPARKY VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	63	26	08-66	759	SOUTH EPPING UNIT NO. 1
DINA	INV. 9-SPOT	42	13	03-72	336	SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1
SURFACE WATER	INV. 9-SPOT	18	5	--	224	TANGLEFLAGS VOLUNTARY UNIT NO. 2
--	--	44	--	--	--	TANGLEFLAGS VOLUNTARY UNIT NO. 3
						AREA II
DEADWOOD	INV. 9-SPOT	83	24	12-85	461	AVON HILL VIKING VOLUNTARY UNIT
--	--	--	--	--	--	BAYHURST VIKING VOLUNTARY GAS UNIT
--	--	2	--	--	--	BROCK VIKING SAND GAS UNIT
--	--	33	--	--	--	COLEVILLE-SMILEY VIKING SAND GAS UNIT
--	--	15	--	--	--	DODSLAND VIKING GAS VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	204	16	01-67	215	EAGLE LAKE VIKING VOLUNTARY UNIT
DEADWOOD	5-SPOT	349	49	10-85	615	EAST DODSLAND VIKING VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	125	30	10-66	340	GLENEATH UNIT
BELLY RIVER	INV. 9-SPOT	7	2	07-85	6	GLENEATH SOUTH VIKING VOLUNTARY UNIT
--	--	2	--	--	--	GLIDDEN VIKING GAS VOLUNTARY UNIT NO. 1
PRODUCED WATER	--	7	2	01-75	156	HOOSIER BAKKEN SAND VOL. UNIT NO. 1
--	--	16	--	--	--	HOOSIER VIKING SAND GAS UNIT
--	--	47	--	--	--	KIYIU LAKE VIKING VOLUNTARY UNIT
--	--	8	--	--	--	LUCKY HILLS VIKING SAND VOLUNTARY GAS UNIT
DEADWOOD	INV. 9-SPOT	83	31	12-85	293	NORTH DODSLAND VIKING VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	46	18	03-63	487	NORTH EUREKA UNIT
RIBSTONE CREEK	LINE DRIVE	16	3	08-70	754	NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT
LEA PARK	--	20	7	12-66	419	NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	13	1	01-73	12	PLATO VIKING VOLUNTARY UNIT NO. 1
--	--	--	--	--	--	SMILEY VIKING GAS VOLUNTARY UNIT NO. 4
RIBSTONE CREEK & BELLY RIVER	INV. 9-SPOT	65	18	09-73	288	SOUTH EUREKA UNIT
--	--	2	--	--	--	TOTNES VIKING GAS VOLUNTARY UNIT NO. 1
--	--	1	--	--	--	WEST BAYHURST VIKING GAS VOLUNTARY UNIT
DUPEROW	INV. 9-SPOT	33	1	05-65	10	WHITESIDE VIKING VOLUNTARY UNIT
--	--	3	--	--	--	WHITESIDE VICTORIA VOLUNTARY GAS UNIT
						AREA III
ROSERAY	--	3	1	10-76	15	ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	97	2	03-62	1411	BATTRUM UNIT NO. 1
--	--		7	10-66		
--	--	13	2	11-65	219	BATTRUM UNIT NO. 2
MANNVILLE	INV. 9-SPOT	26	2	12-66	327	BATTRUM UNIT NO. 3
--	--		3	08-67		
MANNVILLE	INV. 9-SPOT	12	5	08-66	646	BATTRUM UNIT NO. 4
MANNVILLE	PERIPHERAL	22	4	01-66	786	BEVERLEY UNIT NO. 1
BELLY RIVER	PERIPHERAL & INV. 9-SPOT	28	11	05-60	1450	BONE CREEK UNIT

OIL AND GAS UNITS - ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	EFFECTIVE DATE	LATEST BOUNDARY REVISION	PROJECTS
BUTTE VOLUNTARY UNIT	DOME	UPPER SHAUNAVON	1-1-71	2-1-72	WATERFLOOD
CANTUAR UNIT	MOBIL	CANTUAR & LOWER ROSERAY	10-1-58	--	WATERFLOOD
COVINGTON UNIT NO. 1	MOBIL	UPPER SHAUNAVON	7-1-69	--	WATERFLOOD
DELTA UNIT NO. 1	MOBIL	UPPER SHAUNAVON	4-1-66	6-1-69	WATERFLOOD
DELTA UNIT NO. 2	MOBIL	UPPER SHAUNAVON	8-1-69	--	WATERFLOOD
DOLLARD UNIT	ABERFORD	UPPER SHAUNAVON	9-1-55	7-1-72	WATERFLOOD
EAST BEVERLEY VOLUNTARY GAS UNIT NO. 1	MOBIL	CANTUAR	8-1-78	--	--
EAST CANTUAR GAS UNIT	DOME	CANTUAR & ROSERAY	3-1-75	--	GAS STORAGE
EAST CANTUAR UNIT NO. 1	MOBIL	CANTUAR & ROSERAY	3-1-75	--	WATERFLOOD (CANTUAR & ROSERAY)
EAST CANTUAR UNIT NO. 2	DOME	ROSERAY & CANTUAR	3-1-75	--	WATERFLOOD (ROSERAY)
EAST DOLLARD VOLUNTARY UNIT	AMERICAN EAGLE	UPPER SHAUNAVON	10-1-70	--	WATERFLOOD
FOSTERTON MAIN UNIT	MOBIL	ROSERAY	7-1-58	--	WATERFLOOD
FOSTERTON N.W. UNIT	MOBIL	ROSERAY	7-1-58	9-1-70	WATERFLOOD (SUSPENDED) IN-SITU WET COMBUSTION
GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1	DOME	CANTUAR	5-1-72	--	WATERFLOOD
GULL LAKE NORTH SHAUNAVON POOL UNIT	MOBIL	UPPER SHAUNAVON	10-1-58	--	WATERFLOOD
GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1	DOME	UPPER SHAUNAVON	5-1-72	--	WATERFLOOD
HATTON GAS UNIT	SPC	MEDICINE HAT	5-1-59	--	--
HAZLET UNIT	NORCEN	ROSERAY	8-1-66	--	--
ILLERBRUN VOLUNTARY UNIT	DOME	UPPER SHAUNAVON	11-1-66	5-1-67	WATERFLOOD
INSTOW UNIT	ABERFORD	UPPER SHAUNAVON	10-1-59	--	WATERFLOOD
INSTOW SOUTH UPPER SHAUNAVON VOLUNTARY UNIT	UNIVERSAL	UPPER SHAUNAVON	5-1-85	--	--
JOHNSTON UNIT	DOME	BASAL CANTUAR UPPER SHAUNAVON	1-1-63	--	WATERFLOOD (BASAL CANTUAR)
LEITCHVILLE SHAUNAVON VOLUNTARY UNIT	SUNCOR	SHAUNAVON	1-1-68	--	WATERFLOOD
NORTH PREMIER UNIT NO. 1	MOBIL	ROSERAY & UPPER SHAUNAVON	10-1-64	--	WATERFLOOD (ROSERAY)
NORTH PREMIER UNIT NO. 2	MOBIL	PREMIER SAND	7-1-66	--	WATERFLOOD
NORTH PREMIER VOLUNTARY UNIT NO. 4	MOBIL	ROSERAY & UPPER SHAUNAVON	9-1-80	--	WATERFLOOD
NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT	SUNCOR	UPPER SHAUNAVON	11-1-72	--	WATERFLOOD
NORTH RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT	ESSO RESOURCES	UPPER SHAUNAVON	2-1-68	5-1-68	WATERFLOOD
RAPDAN UNIT	ABERFORD	UPPER SHAUNAVON	10-1-57	7-1-65	WATERFLOOD
RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2	SASKOIL	UPPER SHAUNAVON	4-1-74	--	WATERFLOOD
SOUTHWEST SUCCESS VOLUNTARY UNIT	ATCOR	ROSERAY & CANTUAR	4-1-83	--	WATERFLOOD
SUCCESS UNIT	MOBIL	ROSERAY & FOSTERTON	12-1-57	--	WATERFLOOD
SUCCESS ALPHA UNIT	MOBIL	ROSERAY	7-1-60	--	WATERFLOOD
SUCCESS MAIN UNIT	MOBIL	CANTUAR, ROSERAY & FOSTERTON	9-1-62	--	WATERFLOOD (ROSERAY)
SUCCESS NORTH ROSERAY VOLUNTARY UNIT	TRI LINK	ROSERAY	4-1-84	--	WATERFLOOD
SUFFIELD UNIT NO. 1	MOBIL	ROSERAY	7-1-66	4-1-72	WATERFLOOD
SUFFIELD UNIT NO. 2	MOBIL	UPPER SHAUNAVON	9-1-70	--	WATERFLOOD
SUFFIELD UNIT NO. 3	MOBIL	ROSERAY & UPPER SHAUNAVON	6-1-71	4-1-72	WATERFLOOD
VERLO ROSERAY SAND UNIT	MOBIL	ROSERAY	9-1-70	10-1-7	WATERFLOOD
WEST FOSTERTON VOLUNTARY UNIT	TEXACO	ROSERAY	3-1-67	--	WATERFLOOD
AREA IV					
ALAMEDA CENTRAL UNIT	GULF	MIDALE	12-1-62	6-1-69	WATERFLOOD
ALAMEDA EAST UNIT	DOME	MIDALE	8-1-62	9-1-65	WATERFLOOD
ALAMEDA WEST MIDALE VOLUNTARY UNIT NO. 1	ARGYLL	MIDALE	12-1-84		WATERFLOOD
ALIDA UNIT	MOBIL	ALIDA	12-1-57	--	--
ANTLER VOLUNTARY UNIT NO. 1	PLACID	MIDALE	11-1-71	--	WATERFLOOD
BENSON UNIT	SHELL	MIDALE	2-1-65	9-1-67	WATERFLOOD
BENSON MIDALE BEDS VOLUNTARY UNIT NO. 1	DOME	MIDALE	11-1-67	6-1-68	WATERFLOOD
CANTAL FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO. 1	SASKOIL	FROBISHER-ALIDA	1-1-72	--	--

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS PROD.	- INJ	DATE OF FIRST INJECTION	AVERAGE INJECTION RATE M3/DAY	UNIT NAME
BELLY RIVER	INV. 9-SPOT	37	6	11-70	109	BUTTE VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	63	25	08-60	4254	CANTUAR UNIT
		20	--	--	--	
ROSERAY SAND	--	4	1	11-68	43	COVINGTON UNIT NO. 1
BELLY RIVER	INV. 9-SPOT	38	11	12-65	1742	DELTA UNIT NO. 1
BELLY RIVER	--	14	3	10-69	233	DELTA UNIT NO. 2
VIKING, BELLY R & MANNVILLE	SEMI-PERIPHERAL	41	18	03-56	2647	DOLLARD UNIT
--	--	2	--	--	--	EAST BEVERLEY VOLUNTARY GAS UNIT NO. 1
--	--	--	--	--	--	EAST CANTUAR GAS UNIT
MANNVILLE	--	10	2	09-73	159	EAST CANTUAR UNIT NO. 1
		6	3	03-69	289	
MANNVILLE	--	4	1	01-76	20	EAST CANTUAR UNIT NO. 2
		1	--	--	--	
BELLY RIVER	--	9	1	10-70	390	EAST DOLLARD VOLUNTARY UNIT
BELLY RIVER	LINE DRIVE	18	14	06-56	4258	FOSTERTON MAIN UNIT
BELLY RIVER	--	--	--	03-57	--	FOSTERTON N.W. UNIT
--	--	6	2	03-70	433	
BELLY RIVER	PERIPHERAL & MOD. 9-SPOT	7	5	06-70	153	GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1
SURFACE WATER	--	24	3	08-56	1230	GULL LAKE NORTH SHAUNAVON POOL UNIT
BELLY RIVER	--	4	3	05-72	155	GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1
--	--	159	--	--	--	HATTON GAS UNIT
--	--	3	--	--	--	HAZLET UNIT
BELLY RIVER	--	5	3	04-66	771	ILLERBRUN VOLUNTARY UNIT
BELLY RIVER & RAVENSCRAG	PERIPHERAL	47	22	12-57	3290	INSTOW UNIT
--	--	10	--	--	--	INSTOW SOUTH UPPER SHAUNAVON VOLUNTARY UNIT
SURFACE WATER	--	3	2	03-63	76	JOHNSTON UNIT
--	--	1	--	--	--	
BELLY RIVER	--	8	3	07-64	35	LEITCHVILLE SHAUNAVON VOLUNTARY UNIT
MANNVILLE	--	5	3	07-64	1100	NORTH PREMIER UNIT NO. 1
		1	--			
MANNVILLE	--	1	1	06-67	130	NORTH PREMIER UNIT NO. 2
MANNVILLE	PERIPHERAL	16	5	02-65	2506	NORTH PREMIER VOLUNTARY UNIT NO. 4
	--	16	1	12-80	77	
MANNVILLE	--	7	2	02-73	24	NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	--	8	1	07-68	9	NORTH RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	45	16	11-62	563	RAPDAN UNIT
BELLY RIVER	PARTIAL 5-SPOT	4	1	04-74	5	RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2
--	--	9	1	10-80	139	SOUTHWEST SUCCESS VOLUNTARY UNIT
		1	--			
MANNVILLE	PERIPHERAL	25	4	08-58	2026	SUCCESS UNIT
MANNVILLE	--	6	1	09-60	530	SUCCESS ALPHA UNIT
MANNVILLE	PERIPHERAL	17	5	09-56	1238	SUCCESS MAIN UNIT
MANNVILLE	PERIPHERAL	12	1	06-82	285	SUCCESS NORTH ROSERAY VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	10	2	05-66	986	SUFFIELD UNIT NO. 1
BELLY RIVER	--	13	3	07-70	580	SUFFIELD UNIT NO. 2
BELLY RIVER	PERIPHERAL	12	4	06-70	1158	SUFFIELD UNIT NO. 3
		4	1		36	
MANNVILLE	--	14	3	06-65	2717	VERLO ROSERAY SAND UNIT
BELLY RIVER	--	7	3	04-67	394	WEST FOSTERTON VOLUNTARY UNIT
						AREA IV
MANNVILLE	INV. 9-SPOT	13	6	03-60	106	ALAMEDA CENTRAL UNIT
MANNVILLE	INV. 9-SPOT	36	22	12-62	439	ALAMEDA EAST UNIT
MANNVILLE	PERIPHERAL	5	2	12-84	21	ALAMEDA WEST MIDALE VOLUNTARY UNIT NO. 1
--	--	26	--	--	--	ALIDA UNIT
MANNVILLE	--	3	1	11-68	26	ANTLER VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	43	14	11-64	268	BENSON UNIT
MANNVILLE	INV. 9-SPOT	14	3	11-67	19	BENSON MIDALE BEDS VOLUNTARY UNIT NO. 1
--	--	3	--	--	--	CANTAL FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO. 1

OIL AND GAS UNITS - ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	EFFECTIVE DATE	LATEST BOUNDARY REVISION	PROJECTS
CARNDUFF SOUTH MIDALE VOLUNTARY UNIT NO. 1	SCURRY-RAINBOW	MIDALE	1-1-85	--	WATERFLOOD
CARNDUFF VOLUNTARY UNIT NO. 1	SCEPTRE	MIDALE	12-1-70	--	WATERFLOOD
CULLEN UNIT	NORCEN	MIDALE	10-1-65	3-1-66	--
DOUGLASTON-FROBISHER BEDS UNIT	DOME	FROBISHER	6-1-64	--	--
DOUGLASTON-MIDALE BEDS UNIT	DOME	MIDALE	6-1-64	10-1-67	WATERFLOOD
EAST CARNDUFF UNIT	GULF	MIDALE	5-1-62	11-1-65	WATERFLOOD
ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1	ESSO RESOURCES	FROBISHER	12-1-68	--	WATERFLOOD
FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1	PANCANADIAN	RATCLIFFE	8-1-68	9-1-69	WATERFLOOD
FLETWODE ALIDA VOLUNTARY UNIT	CANOXY	ALIDA	10-1-68	--	--
GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT	BERRY	FROBISHER-ALIDA	11-1-72	--	WATERFLOOD (FROBISHER)
GLEN EWEN UNIT	DOME	MIDALE	4-1-63	--	WATERFLOOD
HASTINGS FROBISHER UNIT	SASKOIL	FROBISHER	7-1-71	--	WATERFLOOD
HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 1	GULF	FROBISHER	1-1-70	--	WATERFLOOD
HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 2	HUNT	FROBISHER	10-1-70	--	WATERFLOOD
HUMMINGBIRD BIRDBEAR VOLUNTARY UNIT NO. 1	DOME	BIRDBEAR	12-1-68	--	--
HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1	DOME	RATCLIFFE	12-1-68	--	WATERFLOOD
HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1	TEXACO	MIDALE	2-1-74	--	WATERFLOOD
INGOLDSBY MISSION CANYON VOLUNTARY UNIT	ESSO RESOURCES	ALIDA	9-1-66	--	--
KENOSEE TILSTON BEDS VOLUNTARY UNIT	ABERFORD	TILSTON	9-1-69	--	--
KISBEY UPPER HASTINGS VOLUNTARY UNIT NO. 1	GAS RESOURCES	UPPER HASTINGS	4-1-74	--	--
LAKE ALMA VOLUNTARY UNIT	PANCANADIAN	RATCLIFFE	4-1-69	--	WATERFLOOD
LAMPMAN UNIT	GULF	MIDALE	3-1-64	10-1-67	WATERFLOOD
LOST HORSE HILL FROBISHER-ALIDA BEDS VOL. UNIT NO. 1	ESSO RESOURCES	FROBISHER-ALIDA	1-1-71	--	--
MIDALE UNIT	SHELL	MIDALE	8-1-62	9-1-67	WATERFLOOD
NORTH ALAMEDA UNIT	GULF	MIDALE	5-1-63	--	WATERFLOOD
NORTH CANTAL UNIT	ESSO RESOURCES	ALIDA	1-1-66	4-1-69	--
NORTH CENTRAL WILLMAR VOLUNTARY UNIT	ABERFORD	FROBISHER-ALIDA	3-1-76	--	WATERFLOOD
NORTH DALESBORO UNIT NO. 1	ESSO RESOURCES	FROBISHER-ALIDA	12-1-70	--	WATERFLOOD
NORTHGATE MIDALE VOLUNTARY UNIT	SILVER BAY	MIDALE	1-1-84	--	WATERFLOOD
NORTHWEST BENSON MIDALE VOLUNTARY UNIT	SILVER BAY	MIDALE	2-1-85	--	--
NOTTINGHAM NORTH ALIDA BEDS UNIT	MOBIL	ALIDA	10-1-60	--	--
OUNGRE VOLUNTARY UNIT NO. 1	SUNCOR	OUNGRE	1-1-68	12-1-69	WATERFLOOD
QUEENSVILLE WILLMAR KISBEY SAND VOLUNTARY UNIT	GULF	KISBEY SAND	7-1-69	--	--
ROSEBANK FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO 1.	ESSO RESOURCES	FROBISHER-ALIDA	3-1-69	7-1-71	--
SOUTH ALAMEDA UNIT	SUNCOR	MIDALE	10-1-65	--	WATERFLOOD
SOUTH PINTO UNIT	DOME	MIDALE	2-1-65	10-1-66	WATERFLOOD
STEELMAN FROBISHER BEDS VOLUNTARY UNIT NO. 1	GULF	FROBISHER	10-1-70	--	--
STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 1	BONANZA	MIDALE	5-1-83	--	WATERFLOOD
STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 2	BONANZA	MIDALE	10-1-85	--	--
STEELMAN UNIT NO. IA	ESSO RESOURCES	MIDALE	7-1-61	4-1-69	WATERFLOOD
STEELMAN UNIT NO. II	ESSO RESOURCE	MIDALE	7-1-61	--	WATERFLOOD
STEELMAN UNIT NO. III	GULF	MIDALE	7-1-61	--	WATERFLOOD
STEELMAN UNIT NO. IV	GULF	MIDALE	7-1-61	4-1-69	WATERFLOOD
STEELMAN UNIT NO. V	SUNCOR	MIDALE	7-1-61	7-1-65	WATERFLOOD
STEELMAN UNIT NO. VI	GULF	MIDALE	7-1-61	9-1-68	WATERFLOOD
STEELMAN UNIT NO. VII	SUNCOR	MIDALE	6-1-62	--	WATERFLOOD
VIEWFIELD VOLUNTARY UNIT NO.1	COMAPLEX	FROBISHER	5-1-74	--	--
WEST CARNDUFF UNIT	ESSO RESOURCES	MIDALE	1-1-61	5-1-62	WATERFLOOD
WEYBURN UNIT	PANCANADIAN	MIDALE	7-1-63	3-1-71	WATERFLOOD
WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1	SCEPTRE	FROBISHER-ALIDA	1-1-68	--	WATERFLOOD
WORKMAN-FROBISHER VOLUNTARY UNIT NO. 1	SCURRY-RAINBOW	FROBISHER	4-1-67	--	WATERFLOOD
WORKMAN-MIDALE VOLUNTARY UNIT NO. 1	SADELLE	MIDALE	4-1-68	--	WATERFLOOD
WORKMAN-MIDALE VOLUNTARY UNIT NO. 2	SCURRY-RAINBOW	MIDALE	9-1-68	--	WATERFLOOD

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS		DATE OF FIRST INJECTION	AVERAGE INJECTION RATE M3/DAY	UNIT NAME
		PROD.	- INJ			
PRODUCED WATER	INV. 9-SPOT	16	4	08-85	251	CARNDUFF SOUTH MIDALE VOLUNTARY UNIT NO. 1
RAVENSCRAG	--	3	2	05-71	38	CARNDUFF VOLUNTARY UNIT NO. 1
--	--	8	--	--	--	CULLEN UNIT
--	--	4	--	--	--	DOUGLASTON-FROBISHER BEDS UNIT
MANNVILLE	LINE DRIVE	12	8	06-64	269	DOUGLASTON-MIDALE BEDS UNIT
MANNVILLE	INV. 9-SPOT	108	19	07-62	1249	EAST CARNDUFF UNIT
MANNVILLE	INV. 9-SPOT	27	3	11-70	141	ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	33	8	10-68	508	FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1
--	--	3	--	--	--	FLETWODE ALIDA VOLUNTARY UNIT
PRODUCED WATER	--	7	1	08-73	95	GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	42	6	10-63	351	GLEN EWEN UNIT
MANNVILLE	INV. 9-SPOT	9	2	10-67	180	HASTINGS FROBISHER UNIT
MANNVILLE	PERIPHERAL	28	9	11-66	299	HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT & PERIPHERAL	20	6	11-66	345	HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 2
--	--	4	--	--	--	HUMMINGBIRD BIRDBEAR VOLUNTARY UNIT NO. 1
MANNVILLE	--	9	2	12-67	266	HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1
PRODUCED WATER	--	18	5	09-74	49	HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1
--	--	37	--	--	--	INGOLDSBY MISSION CANYON VOLUNTARY UNIT
--	--	26	--	--	--	KENOSEE TILSTON BEDS VOLUNTARY UNIT
--	--	6	--	--	--	KISBEY UPPER HASTINGS VOLUNTARY UNIT NO. 1
MANNVILLE	--	5	3	06-70	227	LAKE ALMA VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	9	3	04-64	80	LAMPMAN UNIT
--	--	24	--	--	--	LOST HORSE HILL FROBISHER-ALIDA BEDS VOL. UNIT NO. 1
MANNVILLE	INV. 9-SPOT	303	80	06-60	3654	MIDALE UNIT
MANNVILLE	PERIPHERAL	6	4	12-59	73	NORTH ALAMEDA UNIT
--	--	11	--	--	--	NORTH CANTAL UNIT
MANNVILLE	--	6	1	11-76	6	NORTH CENTRAL WILLMAR VOLUNTARY UNIT
MANNVILLE	--	10	2	02-71	191	NORTH DALESBORO UNIT NO. 1
MANNVILLE	INV. 9-SPOT	21	1	07-84	6	NORTHGATE MIDALE VOLUNTARY UNIT
--	--	6	--	--	--	NORTHWEST BENSON MIDALE VOLUNTARY UNIT
--	--	24	--	--	--	NOTTINGHAM NORTH ALIDA BEDS UNIT
MANNVILLE	INV. 9-SPOT	42	13	12-66	346	OUNGRE VOLUNTARY UNIT NO. 1
--	--	3	--	--	--	QUEENSVILLE WILLMAR KISBEY SAND VOLUNTARY UNIT
--	--	30	--	--	--	ROSEBANK FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO 1.
MANNVILLE	INV. 9-SPOT	14	6	02-63	91	SOUTH ALAMEDA UNIT
MANNVILLE	PERIPHERAL	26	6	02-65	264	SOUTH PINTO UNIT
--	--	8	--	--	--	STEELMAN FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	14	3	09-83	662	STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 1
--	--	15	--	--	--	STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 2
MANNVILLE	INV. 9-SPOT	100	35	09-58	1264	STEELMAN UNIT NO. IA
MANNVILLE	INV. 9-SPOT	58	7	02-62	1069	STEELMAN UNIT NO. II
MANNVILLE	INV. 9-SPOT	61	19	01-62	1337	STEELMAN UNIT NO. III
MANNVILLE	INV. 9-SPOT	95	37	02-62	1587	STEELMAN UNIT NO. IV
MANNVILLE	INV. 9-SPOT	36	19	02-62	395	STEELMAN UNIT NO. V
MANNVILLE	INV. 9-SPOT	101	42	02-62	2637	STEELMAN UNIT NO. VI
MANNVILLE	INV. 9-SPOT	13	3	10-62	111	STEELMAN UNIT NO. VII
--	--	9	--	--	--	VIEWFIELD VOLUNTARY UNIT NO.1
MANNVILLE	INV. 9-SPOT	30	12	05-61	390	WEST CARNDUFF UNIT
MANNVILLE	INV. 9-SPOT	485	128	04-64	8631	WEYBURN UNIT
MANNVILLE	--	18	5	02-68	240	WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	29	13	06-67	752	WORKMAN-FROBISHER VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	3	1	04-68	30	WORKMAN-MIDALE VOLUNTARY UNIT NO. 1
MANNVILLE	--	6	1	09-68	79	WORKMAN-MIDALE VOLUNTARY UNIT NO. 2

NON-UNIT AREAS - ENHANCED RECOVERY PROJECTS

POOL NAME	OPERATOR	PRODUCING ZONE	EFFECTIVE DATE	LATEST BOUNDARY REVISION	PROJECTS
AREA I					
CELTIC WASECA SAND	MOBIL	WASECA & G.P.	12-8-77	8-31-84	INTERMITTENT STEAM INJECTION
EYEHILL CUMMINGS SAND	MURPHY	CUMMINGS	12-8-77	5-15-84	IN-SITU COMBUSTION
GOLDEN LAKE SOUTH SPARKY SAND	HUSKY	SPARKY	11-6-68	5-31-83	IN-SITU WET COMBUSTION
GOLDEN LAKE SOUTH WASECA SAND	HUSKY	WASECA	3-19-81	6-6-84	IN-SITU WET COMBUSTION
GOLDEN LAKE SOUTH WASECA SAND	HUSKY	WASECA	2-8-82	--	IN-SITU OXYGEN WET-COMBUSTION
LONE ROCK SPARKY SAND	TEXACO	SPARKY	10-24-83	--	STEAMFLOOD
MISCELLANEOUS LLOYDMINSTER SAND	TEXASGULF	LLOYDMINSTER	2-4-74	3-31-82	CYCLIC STEAM STIMULATION
PIKES PEAK WASECA SAND	HUSKY	WASECA	6-10-81	2-28-84	CYCLIC STEAM STIMUATION
SILVERDALE SPARKY SAND	HOME	SPARKY	6-27-84	--	WATER ALTERNATING GAS
TANGLEFLAGS G.P. SAND	HUSKY	G.P.	11-30-83	--	IN-SITU WET COMBUSTION
AREA II					
BUFFALO COULEE BAKKEN SAND	SASKOIL	BAKKEN	11-28-69	11-23-79	WATERFLOOD
BUFFALO COULEE BAKKEN SAND	PAGE	BAKKEN	11-23-79	7-31-80	WATERFLOOD
COLEVILLE BAKKEN	GENERAL AMERICAN	BAKKEN	12-18-58	6-29-84	WATERFLOOD
DODSLAND VIKING SAND	WESTAR	VIKING	4-1-85	--	PILOT WATERFLOOD
SMILEY-DEWAR VIKING	ESSO RESOURCES	VIKING	9-22-61	5-2-66	WATERFLOOD
SMILEY-DEWAR VIKING	PETRO-CANADA	VIKING	1-30-73	11-1-73	WATERFLOOD
AREA III					
BEVERLEY CANTUAR SAND	MOBIL	CANTUAR	9-29-71	--	PILOT WATERFLOOD
JAVA CANTUAR SAND	TIBER	CANTUAR	6-27-84	--	WATERFLOOD
LEON LAKE SHAUNAVON	ABERFORD	SHAUNAVON	5-5-64	10-17-68	PILOT WATERFLOOD (SUSPENDED)

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS		DATE OF FIRST INJECTION	AVERAGE INJECTION RATE M3/DAY	POOL NAME
		PROD.	- INJ			
						AREA I
SURFACE WATER	INV. 9-SPOT	25	--	10-80	--	CELTIC WASECA SAND
--	INV. 5-SPOT	4	--		--	
GLACIAL DRIFT	INV. 5-SPOT	25	9	06-80	--	EYEHILL CUMMINGS SAND
DINA SAND	INV. 7-SPOT & INV. 9-SPOT	48	10	07-68	--	GOLDEN LAKE SOUTH SPARKY SAND
PRODUCED WATER	INV. 5-SPOT	16	3	04-82	--	GOLDEN LAKE SOUTH WASECA SAND
GLACIAL DRIFT	INV. 7-SPOT	9	2	07-82	--	GOLDEN LAKE SOUTH WASECA SAND
SURFACE WATER	INV. 7-SPOT	13	3	11-84	--	LONE ROCK SPARKY SAND
SURFACE WATER	--	21	3	07-74	--	MISCELLANEOUS LLOYDMINSTER SAND
SURFACE WATER	--	78	1	07-81	--	PIKES PEAK WASECA SAND
SPARKY SAND	--	11	--	--	--	SILVERDALE SPARKY SAND
SURFACE WATER	INV. 7-SPOT	19	--	--	--	TANGLEFLAGS G.P. SAND
						AREA II
BELLY RIVER	INV. 9-SPOT	15	3	07-69	88	BUFFALO COULEE BAKKEN SAND
BELLY RIVER	INV. 9-SPOT	21	5	08-80	30	BUFFALO COULEE BAKKEN SAND
BELLY RIVER	INV. 9-SPOT INV. 5-SPOT	195	90	01-59	4476	COLEVILLE BAKKEN
BELLY RIVER	INV. 5-SPOT	9	4	11-85	26	DODSLAND VIKING SAND
BELLY RIVER	INV. 9-SPOT	110	24	02-62	540	SMILEY-DEWAR VIKING
BELLY RIVER	INV. 9-SPOT	31	12	03-73	175	SMILEY-DEWAR VIKING
						AREA III
BELLY RIVER	INV. 9-SPOT	8	1	10-71	30	BEVERLEY CANTUAR SAND
MANNVILLE	--	2	1	07-84	70	JAVA CANTUAR SAND
RAVENSCRAG	--	3	0	08-64	--	LEON LAKE SHAUNAVON

DEVELOPMENT AND PRODUCING DATA

	PRODUCTION					SPACING REGULATIONS	
POOL NAME	WELLS CAPABLE	WELLS ON	DAILY M3/WELL	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY	DRAINAGE UNITS (LSDS)	TARGET AREA
ABERFELDY SPARKY SAND	397	338	1.5	SOLUTION GAS DRIVE WATER DRIVE PART. GAS CAP DRIVE	WATERFLOOD IN: 1: ABERFELDY UNIT (SUSPENDED) 2: SOUTH ABERFELDY SPARKY VOLUNTARY UNIT (SUSPENDED) IN-SITU WET COMBUSTION IN: ABERFELDY UNIT STEAMFLOOD IN: ABERFELDY UNIT	1	SE 1/4 OF LSD, EXCEPT: A: TWP 49, RGE 26, SEC: NW1/4-4, N1/2-5, 8, 9, W1/2-10, SW1/4-15, 16, 17, E1/2&NW1/4-18, 20, 21, 28, 29; TWP 48, RGE 27, SEC: N1/2-35, NW1/4-36; TWP 49, RGE 27, SEC: 1, 2, 11, 12; WHERE: 1 NW 1/4 OF LSD. B: TWP 49, RGE 27, SEC: 14, 15, NE1/4-21, 22, 23, 27, 28; WHERE: 1 NE 1/4 OF LSD.
ALAMEDA MIDALE BEDS	130	115	1.8	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: ALAMEDA CENTRAL UNIT 2: ALAMEDA EAST UNIT 3: NORTH ALAMEDA UNIT 4: SOUTH ALAMEDA UNIT	2	ODD NUMBERED LSD.
ALAMEDA WEST FROBISHER BEDS	1	0	0.0	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
ALAMEDA WEST MIDALE BEDS	6	6	2.3	SOLUTION GAS DRIVE	WATERFLOOD IN: ALAMEDA WEST VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
ALIDA EAST FROBISHER-ALIDA BEDS	37	29	2.5	WATER DRIVE	NONE	1	CENTER OF LSD, EXCEPT: TWP 5, RGE 33, SEC: 26, 27, 28, S1/2-33, S1/2&NW1/4-34; TWP 6, RGE 33, SEC: SW1/4-3; WHERE: 2 EVEN NUMBERED LSD.
ALIDA WEST ALIDA BEDS	34	33	2.8	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
ALSASK BASAL BLAIRMORE SAND	3	2	1.6	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD, EXCEPT: TWP 29, RGE 29, SEC: NW1/4-10, W1/2-15, SW1/4-22; WHERE: SEE POOL REGULATIONS CONCERNING PARTIAL DRAINAGE UNITS
ANTELOPE LAKE EAST ROSERAY SAND	2	1	1.7	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
ANTELOPE LAKE UPPER SHAUNAVON	4	1	2.4	SOLUTION GAS DRIVE	WATERFLOOD IN: ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT	2	EVEN NUMBERED LSD.
ARCOLA FROBISHER-ALIDA BEDS	43	38	3.4	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 8, RGE 3, SEC: NW1/4-7, 18; TWP 8, RGE 4, SEC: N1/2-1, NE1/4-2, 12, 13; WHERE: 1 CENTER OF LSD.
AUBURNTON FROBISHER-ALIDA BEDS	4	4	2.3	WATER DRIVE	NONE	1	CENTER OF LSD.
AVON HILL VIKING	225	208	0.8	SOLUTION GAS DRIVE	WATERFLOOD IN: AVON HILL VIKING VOLUNTARY UNIT	1	CENTER OF LSD.
BALDWINTON SPARKY SAND	19	10	1.6	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
BATTLE CREEK MADISON	1	0	1.3	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
BATTLE CREEK UPPER SHAUNAVON	2	2	1.8	PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
BATTRUM NORTH ROSERAY SAND	15	13	3.3	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
BATTRUM ROSERAY SAND	166	153	5.3	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	IN-SITU WET COMBUSTION IN: 1: BATTRUM UNIT NO. 1 2: BATTRUM UNIT NO. 2 3: BATTRUM UNIT NO. 3 WATERFLOOD IN: 1: BATTRUM UNIT NO. 1 2: BATTRUM UNIT NO. 3 3: BATTRUM UNIT NO. 4	1	CENTER OF LSD, EXCEPT: A: TWP 18, RGE 16, SEC: 30; TWP 18, RGE 17, SEC: 25, 26, E1/2-27, NE1/4-33, 34, 35, SE1/4&W1/2-36 WHERE: 2 EVEN NUMBERED LSD. B: TWP 19, RGE 17, SEC: 1, S1/2-2; WHERE: 2 ODD NUMBERED LSD.
BENCH UPPER SHAUNAVON	30	23	2.3	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION, EXCEPT: TWP 11, RGE 18, SEC: W1/2-16; WHERE: 4 NE LSD OF 1/4 SECTION

DEVELOPMENT AND PRODUCING DATA - OIL POOLS

POOL NAME	PRODUCTION			NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY	SPACING REGULATIONS	
	WELLS CAPABLE	WELLS ON	DAILY M3/WELL			DRAINAGE UNITS (LSDS)	TARGET AREA
BENSON MIDALE BEDS	106	98	2.4	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: BENSON UNIT 2: BENSON MIDALE VOLUNTARY UNIT NO. 1	4	NW LSD OF 1/4 SECTION, EXCEPT: TWP 6, RGE 8, SEC: N1/2-17, N1/2&SE1/4-18, 19, 20, W1/2-21, SW1/4-28, SW1/4-29, S1/2&NW1/4-30, W1/2-31; TWP 6, RGE 9, SEC: SW1/4&NE1/4-13 NW1/4-15, 16, E1/2-17, W1/2-19, E1/2-20, 21, W1/2&NE1/4-22, W1/2&NE1/4-23, 24 TO 29 INCLUSIVE, S1/2-30, 36; TWP 6, RGE 10, SEC: E1/2-24, SE1/4-25; WHERE: 2 ODD NUMBERED LSD.
BEVERLEY CANTUAR SAND	37	33	2.0	SOLUTION GAS DRIVE	PILOT WATERFLOOD	2	EVEN NUMBERED LSD.
BEVERLEY NORTH CANTUAR SAND	30	27	1.4	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
BEVERLEY UPPER ROSERAY SAND	33	28	3.1	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: BEVERLEY UNIT NO. 1	1	CENTER OF LSD.
BIENFAIT MIDALE BEDS	18	18	7.2	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
BIG GULLY MCLAREN SAND	48	30	2.3	SOLUTION GAS DRIVE	WATERFLOOD IN: BIG GULLY VOLUNTARY UNIT NO. 1 (SUSPENDED)	1	NW 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: NE1/4-7, N1/2-8, SW1/4-17, SE1/4-18; WHERE: 1 NE 1/4 OF LSD.
BIG GULLY WASECA SAND	2	1	3.2	SOLUTION GAS DRIVE	WATERFLOOD IN: BIG GULLY VOLUNTARY UNIT NO. 1 (SUSPENDED)	1	NW 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: NE1/4-7, N1/2-8, SW1/4-17, SE1/4-18; WHERE: 1 NE 1/4 OF LSD.
BONE CREEK UPPER SHAUNAVON	31	28	2.9	SOLUTION GAS DRIVE	WATERFLOOD IN: BONE CREEK UNIT	2	EVEN NUMBERED LSD, EXCEPT: TWP 11, RGE 19, SEC: W1/2-2, 3, E1/2-4; WHERE: 2 ODD NUMBERED LSD.
BROMHEAD MIDALE BEDS	8	6	2.6	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BROWNING FROBISHER-ALIDA BEDS	41	32	2.6	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
BRYANT FROBISHER BEDS	3	3	2.4	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BRYANT MIDALE BEDS	16	15	1.3	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BUFFALO COULEE BAKKEN SAND	47	36	1.5	SOLUTION GAS DRIVE	WATERFLOOD	1/2	NE & SW 1/4 OF LSD.
BUFFALO COULEE NORTH BAKKEN SAND	16	10	1.5	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD.
BUTTE UPPER SHAUNAVON	48	42	3.2	SOLUTION GAS DRIVE	WATERFLOOD IN: BUTTE VOLUNTARY UNIT	2	ODD NUMBERED LSD.
BUZZARD LLOYDMINSTER SAND	41	37	1.6	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
CACTUS LAKE BASAL MANNVILLE-BAKKEN SAND	122	107	5.1	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
CANTAL FROBISHER-ALIDA BEDS	29	27	4.5	WATER DRIVE	NONE	2	EVEN NUMBERED LSD. EXCEPT: TWP 5, RGE 33, SEC: 19, 20, 29, 30; WHERE: 1 CENTER OF LSD.
CANTAL SOUTH FROBISHER-ALIDA BEDS	19	17	1.7	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
CANTUAR EAST CANTUAR SAND	8	7	4.1	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: EAST CANTUAR UNIT NO. 1 GAS STORAGE IN: EAST CANTUAR GAS UNIT	2	SW 1/4 OF EVEN LSD.
CANTUAR EAST ROSERAY SAND	20	13	2.9	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: 1: EAST CANTUAR UNIT NO. 1 2: EAST CANTUAR UNIT NO. 2 GAS STORAGE IN: EAST CANTUAR GAS UNIT	2	SW 1/4 OF EVEN LSD.
CANTUAR LOWER ROSERAY SAND	24	19	7.9	WATER DRIVE	NONE	1	SW 1/4 OF LSD.
CANTUAR MAIN CANTUAR SAND	92	82	3.0	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: CANTUAR UNIT	1	SW 1/4 OF LSD.
CARNDUFF FROBISHER BEDS	20	17	2.5	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 3, RGE 33, SEC: W1/2-5, 6; TWP 3, RGE 34, SEC: 1, 2, 3, 4, 9, 10, 11, W1/2-12, W1/2-14, 15, 16; WHERE: 2 EVEN NUMBERED LSD.

DEVELOPMENT AND PRODUCING DATA - OIL POOLS

POOL NAME	PRODUCTION			NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY	SPACING REGULATIONS	
	WELLS CAPABLE	WELLS ON	DAILY M3/WELL			DRAINAGE UNITS (LSDS)	TARGET AREA
CARNDUFF MIDALE BEDS	173	166	0.9	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: WEST CARNDUFF UNIT 2: EAST CARNDUFF UNIT 3: CARNDUFF VOLUNTARY UNIT NO. 1 4: CARNDUFF SOUTH MIDALE VOLUNTARY UNIT	2	ODD NUMBERED LSD, EXCEPT: TWP 3, RGE 33, SEC: NE1/4&W1/2-4, 5,6,7,8,9,16,17,S1/2-18; TWP 3, RGE 34, SEC: 1,2,3,4,11, 12,S1/2-13; WHERE: 2 EVEN NUMBERED LSD.
CELTIC G.P. SAND	54	47	6.2	SOLUTION GAS DRIVE	PILOT INTERMITTENT STEAM INJECTION	1	SE 1/4 OF LSD.
CELTIC MANNVILLE SANDS	5	5	1.2	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
CELTIC SPARKY SAND	46	42	2.3	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
CELTIC WASECA SAND	117	95	3.1	SOLUTION GAS DRIVE	PILOT INTERMITTENT STEAM INJECTION	1	SE 1/4 OF LSD.
CLARILAW FROBISHER-ALIDA BEDS	9	8	2.1	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
CLARILAW WEST FROBISHER-ALIDA BEDS	9	8	3.3	WATER DRIVE	NONE	1	CENTER OF LSD.
CLINTONVILLE SHAUNAVON	8	5	1.1	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
COLEVILLE BAKKEN SAND	254	225	2.1	SOLUTION GAS DRIVE	WATERFLOOD	1/2	NE & SW 1/4 OF LSD.
COLEVILLE MANNVILLE SAND	14	5	1.0	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD.
COLEVILLE SOUTH BAKKEN SAND	29	23	4.1	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD.
COLEVILLE SOUTH MANNVILLE SAND	8	6	2.2	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD.
COSINE LAKE LLOYDMINSTER SAND	18	13	1.4	GAS CAP DRIVE	NONE	1	SE 1/4 OF LSD.
COURT BAKKEN SAND	37	36	4.6	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
COVINGTON UPPER SHAUNAVON	5	4	2.8	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: COVINGTON UNIT NO 1	2	EVEN NUMBERED LSD.
COVINGTON WEST UPPER SHAUNAVON	4	3	2.5	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
CRYSTAL HILL SOURIS VALLEY BEDS	7	5	1.0	WATER DRIVE	NONE	4	CENTER OF 1/4 SECTION.
DALESBORO FROBISHER-ALIDA BEDS	1	1	2.1	PROBABLE WATER DRIVE	NONE	2	ODD NUMBERED LSD.
DEE VALLEY EAST SPARKY SAND	13	9	1.2	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DEE VALLEY EAST WASECA SAND	21	12	2.0	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DEE VALLEY WASECA SAND	57	50	2.4	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DELTA UPPER SHAUNAVON	64	58	2.3	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: DELTA UNIT NO. 1 2: DELTA UNIT NO. 2	2	EVEN NUMBERED LSD.
DODSLAND VIKING SAND	1969	1868	0.9	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: GLENEATH UNIT 2: EAGLE LAKE VIKING VOLUNTARY UNIT 3: NORTH DODSLAND VIKING VOLUNTARY UNIT 4: GLENEATH SOUTH VIKING VOLUNTARY UNIT PILOT WATERFLOOD	1	CENTER OF LSD.
DOLLARD UPPER SHAUNAVON	60	52	8.8	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: DOLLARD UNIT 2: EAST DOLLARD VOLUNTARY UNIT	4	NW LSD OF 1/4 SECTION.
DRUID MANNVILLE SANDS	12	10	0.9	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
DULWICH SPARKY SAND	145	70	1.0	SOLUTION GAS DRIVE	NONE	1/4	EACH QUADRANT OF LSD.
DULWICH NORTH SPARKY SAND	6	6	1.5	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTH DULWICH VOLUNTARY UNIT (SUSPENDED)	1/2	NE & SW 1/4 OF LSD.
EASTBROOK UPPER SHAUNAVON	9	8	1.4	SOLUTION GAS DRIVE	NONE	2	EVEN NUMBERED LSD.
EASTEND SHAUNAVON	11.	8	1.4	SOLUTION GAS DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: TWP 6, RGE 19, SEC: 5,6,7,8, W1/2-18; TWP 6, RGE 20, SEC: E1/2-1; WHERE: 4 NW LSD IN 1/4 SECTION.
EAST PINTO FROBISHER BEDS	0	0	0.0	PROBABLE WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
EAST PINTO MIDALE BEDS	1	1	1.0	SOLUTION GAS DRIVE	NONE	2	EVEN NUMBERED LSD.
EDAM WASECA SAND	20	7	1.5	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EDAM WEST SPARKY/G.P. SAND	66	57	4.2	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.

DEVELOPMENT AND PRODUCING DATA - OIL POOLS

	PRODUCTION					SPACING REGULATIONS	
POOL NAME	WELLS CAPABLE	WELLS ON	DAILY M3/WELL	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY	DRAINAGE UNITS (LSDS)	TARGET AREA
EDAM WEST MANNVILLE SAND	15	14	4.0	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EDAM WEST WASECA SAND	49	42	3.6	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EDENVALE TILSTON BEDS	10	8	1.8	PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
ELMORE FROBISHER BEDS	32	32	3.5	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
ELMORE MIDALE BEDS	2	2	2.2	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
EPPING G.P. SAND	23	16	1.5	SOLUTION GAS DRIVE	WATERFLOOD IN: SOUTH EPPING UNIT NO. 1	1	SE 1/4 OF LSD, EXCEPT: A: TWP 47, RGE 27, SEC: S1/2&NW1/4-31,SW1/4-32; TWP 48, RGE 27, SEC: SW1/4-6; TWP 47, RGE 28, SEC: N1/2-25,34,35,36; TWP 48, RGE 28, SEC: S1/2-1, S1/2-2; WHERE: 1 NW 1/4 OF LSD. B: TWP 47, RGE 27, SEC: W1/2-17,18,19,20,S1/2&NW1/4-29,30; WHERE: 1/2 NW & SE 1/4 OF LSD.
EPPING SPARKY SAND	284	238	1.5	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SOUTH EPPING UNIT NO. 1 2: SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1	1	SE 1/4 OF LSD, EXCEPT: TWP 47, RGE 27, SEC: W1/2-17,18,19,20,W1/2&SE1/4-29,30,W1/2&SE1/4-31 SW1/4-32; TWP 48, RGE 27, SEC: SW1/4-6; TWP 47, RGE 28, SEC: N1/2-25,34,35,36; TWP 48, RGE 28, SEC: S1/2-1, S1/2-2,SE1/4-3; WHERE: 1/2 NW & SE 1/4 OF LSD.
EUREKA VIKING	193	169	1.0	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH EUREKA UNIT 2: SOUTH EUREKA UNIT	1	CENTER OF LSD.
EYEHILL CUMMINGS SAND	28	23	2.6	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	PILOT IN-SITU DRY COMBUSTION	1	CENTER OF LSD.
FERTILE TILSTON BEDS	3	3	2.0	WATER DRIVE	NONE	1	CENTER OF LSD.
FLAT LAKE RATCLIFFE BEDS	38	31	5.4	SOLUTION GAS DRIVE	WATERFLOOD IN: FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1	4	SW LSD IN 1/4 SECTION, EXCEPT: TWP 1, RGE 16, SEC: S1/2-1, S1/2-2,S1/2-3,S1/2-4,S1/2-5,S1/2-6; WHERE: WELLS LOCATED A MINIMUM DISTANCE OF 1600 FEET FROM U.S. BORDER.
FLORENCE FROBISHER BEDS	5	3	1.5	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
FOREST BANK MANNVILLE SANDS	14	11	1.5	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: A: TWP 48, RGE 24, SEC: 32; TWP 49, RGE 24, SEC: 6; WHERE: 1 SE 1/4 OF LSD. B: TWP 49, RGE 24, SEC: 7,18; TWP 49, RGE 25, SEC: 12,13; WHERE: 1 NE 1/4 OF LSD.
FOREST BANK SPARKY SAND	17	12	2.8	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: (SEE FOREST BANK MANNVILLE SANDS)
FOREST BANK WASECA SAND	25	12	2.1	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: (SEE FOREST BANK MANNVILLE SANDS)
FOSTERTON ROSERAY SAND	42	32	7.6	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: FOSTERTON MAIN UNIT 2: FOSTERTON NORTHWEST UNIT (SUSPENDED) 3: WEST FOSTERTON VOLUNTARY UNIT IN-SITU WET COMBUSTION IN: FOSTERTON NORTHWEST UNIT	1	SW 1/4 OF LSD, EXCEPT: TWP 17, RGE 18, SEC: 4,E1/2-5, E1/2-8,9,LSDS.1,2,3,4,8,9&16-16, LSD 1&2-17 WHERE: 1 CENTER OF LSD.
FREDA LAKE RATCLIFFE BEDS	68	65	2.3	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
FREEMONT SPARKY SAND	19	15	2.0	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
FREEMONT WASECA SAND	22	11	1.9	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
FREESTONE FROBISHER-ALIDA BEDS	21	19	2.9	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
FRYS TILSTON-SOURIS VALLEY BEDS	11	10	1.9	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.

DEVELOPMENT AND PRODUCING DATA - OIL POOLS

POOL NAME	PRODUCTION WELLS CAPABLE	 WELLS ON	 DAILY M3/WELL	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY	SPACING REGULATIONS DRAINAGE UNITS (LSDS)	 TARGET AREA
FURNESS SPARKY SAND	46	35	1.7	SOLUTION GAS DRIVE	NONE	1/4	CENTER OF EACH 1/4 LSD.
FUSILIER BAKKEN SAND	12	8	5.7	SOLUTION GAS DRIVE GAS CAP DRIVE	NONE	1	CENTER OF LSD.
GAINSBOROUGH FROBISHER-ALIDA BEDS	22	21	1.5	SOLUTION GAS DRIVE	WATERFLOOD IN: GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT	2	ODD NUMBERED LSD.
GLEN EWEN FROBISHER BEDS	5	5	2.7	PROBABLE WATER DRIVE	NONE	4	SE LSD OF 1/4 SECTION.
GLEN EWEN MIDALE BEDS	52	44	1.1	SOLUTION GAS DRIVE	WATERFLOOD IN: GLEN EWEN UNIT	2	ODD NUMBERED LSD. EXCEPT: A: TWP 2, RGE 1, SEC: N1/2-26,32, S1/2-33,S1/2&NW1/4-34,SE1/4-35; TWP 3, RGE 1, SEC: NW1/4-8, N1/2-10,N1/2-11,NE1/4-12,S1/2-13, W1/2-15,SE1/4-16,W1/2&NE1/4-20, W1/2-22; WHERE: 4 SE LSD OF 1/4 SECTION B: TWP 2, RGE 1, SEC: LSD 1,2,3,4 OF SECTIONS 1 TO 5 INCLUSIVE; WHERE: (SEE POOL REGULATIONS REGARDING PARTIAL LEGAL SUBDIVISIONS).
GOLDEN LAKE NORTH SPARKY SAND	33	30	1.9	SOLUTION GAS DRIVE	WATERFLOOD IN: GOLDEN LAKE VOLUNTARY UNIT (SUSPENDED)	1	SE 1/4 OF LSD. EXCEPT: TWP 48, RGE 23, SEC: 19,29,30, E1/2&SW1/4-31,32; TWP 48, RGE 24, SEC: NE1/4-24, SE1/4-25; WHERE: 1 SW 1/4 OF LSD.
GOLDEN LAKE NORTH WASECA SAND	92	83	2.1	SOLUTION GAS DRIVE	WATERFLOOD IN: GOLDEN LAKE VOLUNTARY UNIT (SUSPENDED)	1	SE 1/4 OF LSD. EXCEPT: TWP 48, RGE 23, SEC: 19,29,30, E1/2&SW1/4-31,32; TWP 48, RGE 24, SEC: NE1/4-24, SE1/4-25; WHERE: 1 SW 1/4 OF LSD.
GOLDEN LAKE SOUTH SPARKY SAND	88	62	2.3	SOLUTION GAS DRIVE	PILOT IN-SITU WET COMBUSTION	1	SE 1/4 OF LSD.
GOLDEN LAKE SOUTH WASECA SAND	123	100	2.7	SOLUTION GAS DRIVE	TWO IN-SITU WET COMBUSTION PILOT PROJECTS-OXYGEN ENRICHED	1	SE 1/4 OF LSD.
GRIFFIN FROBISHER BEDS	7	7	0.5	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
GULL LAKE BASAL CANTUAR SAND	23	10	5.3	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: JOHNSTON UNIT 2: GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1	1	SE 1/4 OF LSD.
GULL LAKE CENTRAL UPPER SHAUNAVON	33	22	1.8	SOLUTION GAS DRIVE	WATERFLOOD IN: GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1	2	SE 1/4 OF EVEN LSD.
GULL LAKE NORTH UPPER SHAUNAVON	36	26	4.1	SOLUTION GAS DRIVE	WATERFLOOD IN: GULL LAKE NORTH SHAUNAVON UNIT	1	SE 1/4 OF LSD.
GULL LAKE SOUTH UPPER SHAUNAVON	13	9	1.2	SOLUTION GAS DRIVE	NONE	4	SW LSD OF 1/4 SECTION. EXCEPT: TWP 12, RGE 19, SEC: N1/2-14, N1/2-15,NE1/4-21,22,23,N1/2&SW1/4-24 SW1/4-26,S1/2-27,SE1/4-28; WHERE: 4 NE LSD OF 1/4 SECTION.
GULLY LAKE WASECA SAND	103	83	3.9	SOLUTION GAS DRIVE	WATERFLOOD IN: GULLY LAKE WASECA VOLUNTARY UNIT	1	SE 1/4 OF LSD.
HANDSWORTH ALIDA BEDS	26	22	1.3	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HARTAVEN FROBISHER-ALIDA BEDS	7	7	3.2	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HASTINGS EAST FROBISHER BEDS	20	15	4.0	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
HASTINGS FROBISHER BEDS	142	124	1.8	SOLUTION GAS DRIVE WATER DRIVE	WATERFLOOD IN: 1: HASTINGS FROBISHER UNIT 2: HASTINGS VOLUNTARY UNIT NO. 1 3: HASTINGS VOLUNTARY UNIT NO. 2	2	EVEN NUMBERED LSD. EXCEPT: A: TWP 3, RGE 1, SEC: 25,36; WHERE: 2 ODD NUMBERED LSD. B: TWP 4, RGE 34, SEC: NW1/4-14, N1/2&SW1/4-15,16,SW1/4-21,S1/2& NE1/4-22,LSDS.3&4-23; TWP 4, RGE 1, SEC: LSDS.7&8& N1/2-12,LSDS.11&12,NE1/4&S1/2-13, LSDS.7&8-14,SE1/4-24; WHERE: 1 CENTER OF LSD.

DEVELOPMENT AND PRODUCING DATA - OIL POOLS

POOL NAME	PRODUCTION WELLS CAPABLE	 WELLS ON	 DAILY M3/WELL	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY	SPACING REGULATIONS DRAINAGE UNITS (LSDS)	 TARGET AREA
HAZELWOOD TILSTON BEDS	8	8	3.6	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
HAZLET ROSERAY SAND	6	3	4.9	SOLUTION GAS DRIVE	NONE	2	EVEN NUMBERED LSD.
HEARTS HILL BAKKEN SAND	19	18	2.3	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
HOFFER RATCLIFFE LOWER BEDS	3	3	3.7	SOLUTION GAS DRIVE	NONE	4	SE LSD OF 1/4 SECTION, EXCEPT: TWP 1, RGE 15, SEC: 28,29,S1/2-32 S1/2-33; WHERE: 4 SW LSD OF 1/4 SECTION.
HOFFER RATCLIFFE UPPER BEDS	9	9	2.8	SOLUTION GAS DRIVE	NONE	4	SE LSD OF 1/4 SECTION, EXCEPT: TWP 1, RGE 15, SEC: 28,29,S1/2-32 S1/2-33; WHERE: 4 SW LSD OF 1/4 SECTION.
HOOSIER BAKKEN SAND	34	21	3.6	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: HOOSIER BAKKEN SAND VOLUNTARY UNIT NO. 1	1	CENTER OF LSD.
HUME FROBISHER BEDS	7	7	3.5	PROBABLE WATER DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
HUME MIDALE BEDS	21	17	1.0	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION, EXCEPT: TWP 7, RGE 12, SEC: 31,W1/2-32; TWP 8, RGE 12, SEC: N1/2-3, SE1/4-4,S1/2-5,S1/2-6; WHERE: 2 ODD NUMBERED LSD.
HUMMINGBIRD BIRDBEAR	4	4	6.1	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HUMMINGBIRD RATCLIFFE BEDS	9	9	7.4	SOLUTION GAS DRIVE	WATERFLOOD IN: HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
HUNTOON FROBISHER BEDS	31	23	1.7	WATER DRIVE	NONE	4	SE LSD IN 1/4 SECTION, EXCEPT: TWP 6, RGE 9, SEC: N1/2-30,31,32, 33,34; TWP 7, RGE 9, SEC: 3,4,E1/2-5,10; TWP 6, RGE 10, SEC: N1/2-25, NE1/4-26,E1/2-33,34,35,36; TWP 7, RGE 10, SEC: 4; WHERE: 2 ODD NUMBERED LSD.
HUNTOON MIDALE BEDS	51	45	1.4	SOLUTION GAS DRIVE	WATERFLOOD IN: HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1	4	SE LSD IN 1/4 SECTION, EXCEPT: (SEE HUNTOON FROBISHER BEDS POOL)
ILLERBRUN UPPER SHAUNAVON	8	6	10.1	SOLUTION GAS DRIVE	WATERFLOOD IN: ILLERBRUN VOLUNTARY UNIT	4	SE LSD IN 1/4 SECTION.
INGOLDSBY FROBISHER-ALIDA BEDS	86	83	2.5	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
INNES FROBISHER BEDS	55	52	2.3	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
INSTOW UPPER SHAUNAVON	65	57	7.1	SOLUTION GAS DRIVE	WATERFLOOD IN: INSTOW UNIT	4	SE LSD OF 1/4 SECTION, EXCEPT: TWP 9, RGE 17, SEC: NW1/4-18, SW1/4-19; TWP 9, RGE 18, SEC: N1/2-13, S1/2-23,24; WHERE: 2 ODD NUMBERED LSD.
JAVA CANTUAR SAND	5	5	2.4	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
JOHNSTON UPPER SHAUNAVON	1	1	1.3	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
KENOSEE TILSTON BEDS	35	26	5.6	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
KERROBERT VIKING SAND	545	539	1.2	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
KISBEY BIRDBEAR	8	5	8.8	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
LAKE ALMA RATCLIFFE BEDS	5	5	7.6	SOLUTION GAS DRIVE	WATERFLOOD IN: LAKE ALMA VOLUNTARY UNIT	2	EVEN NUMBERED LSD.
LANDROSE MCLAREN SAND	3	1	0.1	SOLUTION GAS DRIVE	NONE	1/2	NE & SW 1/4 OF LSD.
LANDROSE WASECA SAND	8	4	1.8	SOLUTION GAS DRIVE	NONE	1/2	NE & SW 1/4 OF LSD.
LASHBURN SOUTH SPARKY SAND	6	6	1.2	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: TWP 48, RGE 23, SEC: 18; TWP 48, RGE 24, SEC: NW1/4-14, NE1/4-15,E1/2-22,23; WHERE: 1 SE 1/4 OF LSD.

DEVELOPMENT AND PRODUCING DATA - OIL POOLS

POOL NAME	PRODUCTION			NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY	SPACING REGULATIONS	
	WELLS CAPABLE	WELLS ON	DAILY M3/WELL			DRAINAGE UNITS (LSDS)	TARGET AREA
LASHBURN SOUTH WASECA SAND	34	23	2.4	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: -SEE LASHBURN SOUTH SPARKY SAND POOL
LASHBURN WASECA SAND	76	56	2.9	SOLUTION GAS DRIVE	WATERFLOOD IN: LASHBURN WASECA VOLUNTARY UNIT (SUSPENDED)	1	SW 1/4 OF LSD.
LASHBURN WEST SPARKY SAND	35	12	1.3	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
LEITCHVILLE SHAUNAVON	40	35	1.7	SOLUTION GAS DRIVE	WATERFLOOD IN: LEITCHVILLE SHAUNAVON VOLUNTARY UNIT	4	SW LSD OF 1/4 SECTION, EXCEPT: TWP 8, RGE 18, SEC: N1/2-31, N1/2-32 TWP 9, RGE 18 SEC: W1/2-4, 5, 6, 7, 8, 9, W1/2-10, S1/2&NW1/4-16, 17, 18, S1/2-19, S1/2-20; WHERE: 2 EVEN NUMBERED LSD.
LEON LAKE SHAUNAVON	16	14	1.6	SOLUTION GAS DRIVE	PILOT WATERFLOOD	4	SE LSD OF 1/4 SECTION.
LIGHTNING TILSTON BEDS	4	4	2.2	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
LLOYDMINSTER SPARKY SAND	15	12	2.2	SOLUTION GAS DRIVE	NONE	1/2	NW & SE 1/4 OF LSD, EXCEPT: SPECIAL PROVISIONS FOR PARTIAL LSD.
LONE ROCK SPARKY SAND	74	44	2.5	SOLUTION GAS DRIVE	PILOT STEAMFLOOD	1/4	CENTER OF EACH 1/4 LSD.
LOST HORSE HILL FROBISHER-ALIDA BEDS	50	49	3.9	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 10, RGE 8, SEC: 11, 12, SW1/4-13, S1/2-14, SE1/4-15; WHERE: 1 CENTER OF LSD.
LOUGHEED MIDALE BEDS	24	23	2.6	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 6, RGE 14, SEC: N1/2-20, 29, 32 WHERE: 2 EVEN NUMBERED LSD.
LOVERNA DETRITAL	10	6	1.5	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
LOW LAKE WASECA SAND	8	7	1.3	SOLUTION GAS DRIVE	NONE	1/2	NE & SW 1/4 OF LSD.
LUCKY HILLS VIKING	29	14	0.8	SOLUTION GAS DRIVE GAS CAP DRIVE	NONE	2	EVEN NUMBERED LSD.
LUSELAND BAKKEN SAND	42	33	2.8	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MACKLIN SPARKY SAND	58	35	2.0	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
MACOUN MIDALE BEDS	16	14	2.4	PARTIAL WATER DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MACOUN WEST MIDALE BEDS	5	4	2.8	PROBABLE WATER DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MAIDSTONE MCLAREN SAND	57	48	1.9	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MAIDSTONE WASECA SAND	14	12	1.8	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MAIN SUCCESS ROSERAY SAND	23	17	4.0	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS MAIN UNIT	1	SW 1/4 OF LSD.
MANITO LAKE SPARKY SAND	46	34	3.9	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MARSDEN SOUTH SPARKY SAND	60	41	4.7	SOLUTION GAS DRIVE	WATERFLOOD IN: MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1	1	SE 1/4 OF LSD.
MARSDEN SPARKY SAND	12	8	2.1	SOLUTION GAS DRIVE	NONE	1/4	CENTER OF EACH 1/4 LSD.
MELROSE FROBISHER-ALIDA BEDS	6	4	1.7	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
MIDALE CENTRAL FROBISHER BEDS	16	14	2.2	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
MIDALE CENTRAL MIDALE BEDS	463	401	2.3	SOLUTION GAS DRIVE	WATERFLOOD IN: MIDALE UNIT PILOT CARBON DIOXIDE FLOOD IN: MIDALE UNIT	2	ODD NUMBERED LSD.
MINARD MIDALE BEDS	3	3	1.4	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MOOSE MOUNTAIN TILSTON BEDS	26	24	3.8	WATER DRIVE	NONE	1	CENTER OF LSD.
MOOSE VALLEY TILSTON BEDS	4	4	2.2	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
MORRISVIEW FROBISHER-ALIDA BEDS	6	4	1.7	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
NEILBURG MCLAREN SAND	75	67	3.1	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NEPTUNE RATCLIFFE BEDS	17	16	2.9	SOLUTION GAS DRIVE	NONE	4	CENTER OF 1/4 SECTION.
NORTH ANTLER MIDALE BEDS	4	3	1.0	SOLUTION GAS DRIVE	WATERFLOOD IN: ANTLER VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.

DEVELOPMENT AND PRODUCING DATA - OIL POOLS

POOL NAME	PRODUCTION			NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY	SPACING REGULATIONS	
	WELLS CAPABLE	WELLS ON	DAILY M3/WELL			DRAINAGE UNITS (LSDS)	TARGET AREA
NORTHGATE FROBISHER BEDS	1	1	0.9	PROBABLE WATER DRIVE	NONE	4	SE LSD OF 1/4 SECTION.
NORTHGATE MIDALE BEDS	23	22	0.8	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTHGATE MIDALE VOLUNTARY UNIT	2	ODD NUMBERED LSD.
NORTH HANDSWORTH ALIDA BEDS	25	23	1.4	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
NORTH HOOSIER BAKKEN SAND	36	28	4.1	POSSIBLE WATER DRIVE	WATERFLOOD IN: NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT	1	CENTER OF LSD.
NORTH HOOSIER BASAL BLAIRMORE	24	21	3.3	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT	1/2	SW & NE 1/4 OF LSD.
NORTHMINSTER SPARKY SAND	68	59	1.5	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTHMINSTER SPARKY VOLUNTARY UNIT (SUSPENDED)	1	SW 1/4 OF LSD. EXCEPT: TWP 50, RGE 27, SEC: NW1/4-2, 11, LSDS. 12, 13, 14, 15&16-12, S1/2&NW1/4-13, 14; WHERE: 1 SE 1/4 OF LSD.
NORTHMINSTER NORTH G.P. SAND	5	2	1.1	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NORTHMINSTER NORTH SPARKY SAND	21	15	1.4	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NORTH PREMIER ROSERAY SAND	30	25	5.6	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH PREMIER UNIT NO. 1 2: NORTH PREMIER UNIT NO. 4	1	SW 1/4 OF LSD.
NORTH PREMIER UPPER SHAUNAVON	35	30	1.5	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT 2: NORTH PREMIER UNIT NO. 4	1	SW 1/4 OF LSD. EXCEPT: TWP 14, RGE 19, SEC: 26, E1/2-27, 34, 35; WHERE: 2 SW 1/4 OF ODD LSD.
NORTH SMILEY BAKKEN SAND	6	5	2.6	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NOTTINGHAM ALIDA BEDS	45	42	2.5	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
OAKLEY FROBISHER BEDS	6	5	1.0	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
OUNGRE RATCLIFFE BEDS	69	63	2.4	SOLUTION GAS DRIVE	WATERFLOOD IN: OUNGRE VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
PARKMAN SOURIS VALLEY BEDS	19	18	1.3	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
PARKMAN TILSTON BEDS	9	9	3.3	WATER DRIVE	NONE	1	CENTER OF LSD.
PARKMAN TILSTON-SOURIS VALLEY	187	172	2.3	WATER DRIVE	NONE	1	CENTER OF LSD.
PARKMAN SOUTH TILSTON-SOURIS VALLEY	5	5	2.2	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
PENNANT UPPER SHAUNAVON	6	6	1.8	SOLUTION GAS DRIVE	NONE	2	EVEN NUMBERED LSD.
PIKES PEAK G.P. SAND	12	11	4.5	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
PIKES PEAK SPARKY SAND	10	5	1.1	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
PIKES PEAK WASECA SAND	79	60	12.1	SOLUTION GAS DRIVE	CYCLIC STEAM STIMULATION	1	SE 1/4 OF LSD.
PINTO FROBISHER BEDS	14	12	2.8	WATER DRIVE	NONE	2	EVEN NUMBERED LSD. EXCEPT: A: TWP 1, RGE 4, SEC: W1/2-18, NE1/4& W1/2-19, NW1/4-20, N1/2-28, NE1/4&W1/2-29, 30, S1/2&NW1/4-31, 32, 33; TWP 1, RGE 5, SEC: 1 TO 4, 8 TO 17, 20 TO 29, ALL INCLUSIVE, E1/2& SW1/4-36; WHERE: 4 NE LSD OF 1/4 SECTION. B: TWP 2, RGE 4, SEC: N1/2-21, N1/2-22, 26, 27, 34, 35; WHERE: 4 SW LSD OF 1/4 SECTION.
PINTO MIDALE BEDS	78	67	1.6	SOLUTION GAS DRIVE	WATERFLOOD IN: SOUTH PINTO UNIT	2	EVEN NUMBERED LSD. EXCEPT: (SEE PINTO FROBISHER BEDS POOL)
PLATO NORTH VIKING	121	120	1.1	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
PLATO VIKING	60	27	0.8	SOLUTION GAS DRIVE	WATERFLOOD IN: PLATO VIKING VOLUNTARY UNIT NO. 1	1	CENTER OF LSD.
PLOVER LAKE BAKKEN SAND	37	29	2.6	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
QUEENSDALE EAST FROBISHER-ALIDA BEDS	131	127	4.6	WATER DRIVE	NONE	1	CENTER OF LSD.
QUEENSDALE NORTH ALIDA BEDS	13	13	1.6	WATER DRIVE	NONE	1	CENTER OF LSD.

DEVELOPMENT AND PRODUCING DATA - OIL POOLS

POOL NAME	PRODUCTION WELLS CAPABLE	PRODUCTION WELLS ON	PRODUCTION DAILY M3/WELL	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY	SPACING REGULATIONS DRAINAGE UNITS (LSDS)	SPACING REGULATIONS TARGET AREA
QUEENSDALE WEST ALIDA BEDS	21	21	1.8	WATER DRIVE	NONE	1	CENTER OF LSD.
RALPH MIDALE BEDS	26	22	0.7	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
RAPDAN UPPER SHAUNAVON	62	60	3.7	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: RAPDAN UNIT 2: NORTH RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT 3: RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2 PILOT POLYMER FLOOD IN: RAPDAN UNIT	4	SW LSD OF 1/4 SECTION. EXCEPT: A: TWP 3, RGE 20, SEC: NE1/4-32, NW1/4-33; TWP 4, RGE 20, SEC: W1/2-4, E1/2-5 E1/2-8, W1/2-9, SW1/4-16, SE1/4-17; WHERE: 4 NE LSD. IN 1/4 SECTION. B: TWP 4, RGE 20, SEC: NW1/4-36; TWP 5, RGE 19, SEC: 6, SE1/4-7; TWP 5, RGE 20, SEC: E1/2-1; WHERE: 2 EVEN NUMBERED LSD.
RAPDAN WEST SHAUNAVON	19	19	1.8	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
RED JACKET GRAVELBOURG	1	1	9.3	PROBABLE WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
RED JACKET SHAUNAVON-GRAVELBOURG	9	9	8.5	PROBABLE WATER DRIVE	NONE	1	CENTER OF LSD.
ROCANVILLE BAKKEN SAND	11	10	2.8	PARTIAL WATER DRIVE	NONE	1	CENTER OF LSD.
RONCOTT BAKKEN SAND	6	4	0.9	POSSIBLE WATER DRIVE	NONE	2	ODD NUMBERED LSD.
ROSEBANK ALIDA BEDS	61	51	3.4	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
ROSEBANK SOUTH ALIDA BEDS	12	12	2.0	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
RUSH LAKE SPARKY SAND	33	28	1.5	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
RUSH LAKE WASECA SAND	24	17	1.5	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
SALT LAKE LLOYDMINSTER SAND	44	41	5.6	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
SENLAC LLOYDMINSTER SAND	84	77	3.2	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
SHERWOOD FROBISHER BEDS	17	14	6.2	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
SILVERDALE SPARKY SAND	106	48	1.5	SOLUTION GAS DRIVE	PILOT WATER ALTERNATING GAS INJECTION	1/4	CENTER OF EACH 1/4 LSD. EXCEPT: TWP 48, RGE 28, SEC: LSDS. 1,8,9, AND 16-27, LSD 1,8,9 AND 16-34; TWP 49, RGE 27, SEC: N1/2-6; TWP 49, RGE 28, SEC: LSDS. 1,8,9, AND 16-3, LSD 1,8,9, AND 16-10, LSD 1,8,9, AND 16-15; WHERE: SPECIAL PROVISIONS FOR PARTIAL SECTIONS.
SILVERTON FROBISHER BEDS	3	3	1.4	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
SKINNER LAKE RATCLIFFE BEDS	19	17	3.5	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
SMILEY-DEWAR VIKING	223	212	1.2	SOLUTION GAS DRIVE	WATERFLOOD	1	CENTER OF LSD.
SOURIS FLAT FROBISHER BEDS	22	16	2.2	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
SOUTH FLETWODE TILSTON BEDS	16	15	2.7	WATER DRIVE	NONE	1	CENTER OF LSD.
SOUTH SUCCESS ROSERAY SAND	41	34	5.7	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: SUCCESS UNIT	1	SW 1/4 OF LSD.
STANDARD HILL WASECA SAND	102	84	3.2	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
STAR VALLEY FROBISHER-ALIDA BEDS	42	41	5.5	WATER DRIVE	NONE	1	CENTER OF LSD.
STEELMAN FROBISHER BEDS	63	53	1.9	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
STEELMAN MIDALE BEDS	623	380	2.3	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: STEELMAN UNIT NO. 1A 2: STEELMAN UNIT NO. 2 3: STEELMAN UNIT NO. 3 4: STEELMAN UNIT NO. 4 5: STEELMAN UNIT NO. 5 6: STEELMAN UNIT NO. 6 7: STEELMAN UNIT NO. 7 8: LAMPMAN UNIT 9: DOUGLASTON MIDALE BEDS UNIT 10: STEELMAN NORTH VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
STORTHOAKS ALIDA-TILSTON BEDS	20	20	1.8	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
STOUGHTON FROBISHER-ALIDA BEDS	11	10	1.7	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
STOUGHTON SOUTH FROBISHER BEDS	16	13	1.1	PROBABLE WATER DRIVE	NONE	2	ODD NUMBERED LSD.
SUCCESS NORTH ROSERAY SAND	13	12	7.6	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS NORTH ROSERAY VOLUNTARY UNIT	1	CENTER OF LSD.

DEVELOPMENT AND PRODUCING DATA - OIL POOLS

POOL NAME	PRODUCTION WELLS CAPABLE	 WELLS ON	 DAILY M3/WELL	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY	SPACING REGULATIONS DRAINAGE UNITS (LSDS)	 TARGET AREA
SUCCESS ROSERAY SAND ALPHA	6	6	5.1	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS ALPHA UNIT	1	SW 1/4 OF LSD.
SUFFIELD ROSERAY SAND	23	22	9.4	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SUFFIELD UNIT NO. 1 2: SUFFIELD UNIT NO. 3	2	ODD NUMBERED LSDS, EXCEPT: TWP 14, RGE 19, SEC: 17,E1/2 AND NW1/4-18,E1/2-19,E1/2-20; WHERE: 1 CENTER OF LSD.
SUFFIELD UPPER SHAUNAVON	22	20	3.4	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SUFFIELD UNIT NO. 2 2: SUFFIELD UNIT NO. 3	2	ODD NUMBERED LSD.
TANGLEFLAGS EAST MCLAREN SAND	16	8	2.6	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS G.P. SAND	130	120	3.0	SOLUTION GAS DRIVE	PILOT IN-SITU WET COMBUSTION	1	SE 1/4 OF LSD.
TANGLEFLAGS LLOYDMINSTER SAND	229	198	1.6	SOLUTION GAS DRIVE	WATERFLOOD IN: TANGLEFLAGS VOLUNTARY UNIT NO. 2	1	SE 1/4 OF LSD.
TANGLEFLAGS MANNVILLE SANDS	26	22	2.4	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS MCLAREN SAND	22	11	1.8	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS NORTH CUMMINGS	14	4	4.9	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS NORTH G.P. SAND	13	8	0.6	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS NORTH LLOYD. SAND	64	45	2.3	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS SPARKY SAND	42	33	2.6	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST G.P. SAND	5	3	1.2	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST LLOYD. SAND	22	20	1.4	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST SPARKY SAND	11	9	1.8	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TATAGWA MIDALE BEDS	40	32	4.3	PROBABLE WATER DRIVE	NONE	2	ODD NUMBERED LSD.
VERLO ROSERAY SAND	14	14	15.8	SOLUTION GAS DRIVE	WATERFLOOD IN: VERLO ROSERAY SAND UNIT	2	EVEN NUMBERED LSD.
VIEWFIELD FROBISHER BEDS	75	67	4.8	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	1	CENTER OF LSD.
VIEW HILL MIDALE BEDS	5	4	1.8	WATER DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
WAPELLA SAND	61	56	3.7	WATER DRIVE	NONE	1	CENTER OF LSD.
WARMLEY ALIDA BEDS	3	3	4.5	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WAUCHOPE ALIDA-TILSTON BEDS	11	11	8.0	WATER DRIVE	NONE	1	CENTER OF LSD.
WEIR HILL FROBISHER BEDS	2	2	2.2	PROBABLE WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WEST INNES FROBISHER BEDS	5	4	1.3	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WEST KINGSFORD MIDALE BEDS	29	26	1.6	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WESTHAZEL G.P. SAND	21	17	3.4	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
WESTHAZEL SPARKY SAND	36	29	1.9	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
WEYBURN FROBISHER BEDS	25	21	2.8	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: TWP 6, RGE 11, SEC: W1/2-31; TWP 7, RGE 11, SEC: 6,7; TWP 5, RGE 12, SEC: NW1/4-35; TWP 6, RGE 12, SEC: LSDS.13&14-1, NE1/4&W1/2&LSDS.7&8-2,11,W1/2-12, 13,14,NE1/4-22,23,24,25,26,27,33, 34,35,36; TWP 7, RGE 12, SEC: 1,E1/2 AND NE1/4-2,E1/2-3,NE1/4-4,E1/2-11,12; WHERE: 2 ODD NUMBERED LSD.
WEYBURN MIDALE BEDS	687	634	2.9	SOLUTION GAS DRIVE	WATERFLOOD IN: WEYBURN UNIT	2	EVEN NUMBERED LSD, EXCEPT: TWP 6, RGE 11, SEC: W1/2-31; TWP 7, RGE 11, SEC: 6,7; TWP 5, RGE 12, SEC: LSDS.11&12-35 TWP 6, RGE 12, SEC: LSDS.13&14-12 13,LSDS.9,10,13&14-14,NE1/4-22,23, 24,25,LSDS.3&4&E1/2-26,LSDS.5,6,7&8 &E1/2-33,NE1/4-34,E1/2&NW1/4-35,36; TWP 7, RGE 12, SEC: 1,E1/2 AND NE1/4-2,E1/2-3,NE1/4-4,E1/2-11,12; WHERE: 2 ODD NUMBERED LSD.
WEYBURN NORTH FROBISHER BEDS	11	9	1.8	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WEYBURN NORTH MIDALE BEDS	24	21	1.9	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.

DEVELOPMENT AND PRODUCING DATA - OIL POOLS

POOL NAME	PRODUCTION			NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY	SPACING REGULATIONS	
	WELLS CAPABLE	WELLS ON	DAILY M3/WELL			DRAINAGE UNITS (LSDS)	TARGET AREA
WHITE BEAR TILSTON BEDS	20	20	4.6	WATER DRIVE	NONE	1	CENTER OF LSD.
WHITE BEAR TILSTON-SOURIS VALLEY BEDS	5	4	1.0	WATER DRIVE	NONE	1	CENTER OF LSD.
WHITEMUD UPPER SHAUNAVON	5	5	0.7	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
WHITESIDE VIKING SAND	70	66	0.8	SOLUTION GAS DRIVE	WATERFLOOD IN: WHITESIDE VIKING VOLUNTARY UNIT	1	CENTER OF LSD.
WILDWOOD ALIDA BEDS	6	6	1.8	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
WILLMAR FROBISHER-ALIDA BEDS	118	101	3.0	WATER DRIVE SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: 1: WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1 2: NORTH DALESBORO UNIT NO. 1 3: NORTH CENTRAL WILLMAR VOLUNTARY UNIT	2 EXCEPT: TWP 5, RGE 2, SEC: W1/2&NE1/4-31; TWP 6, RGE 2, SEC: 6,S1/2 AND NE1/4-7,SW1/4-8; TWP 5, RGE 3, SEC: NE1/4-25,35,36 TWP 6, RGE 3, SEC: 1,S1/2 AND NE1/4-2,SE1/4-12; WHERE: 1	EVEN NUMBERED LSD, CENTER OF LSD.
WINMORE FROBISHER BEDS	8	7	0.7	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WINTER CUMMINGS SAND	14	11	0.8	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
WORKMAN FROBISHER BEDS	104	99	2.3	SOLUTION GAS DRIVE WATER DRIVE	WATERFLOOD IN: WORKMAN FROBISHER VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
WORKMAN MIDALE BEDS	28	16	1.0	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: WORKMAN MIDALE VOLUNTARY UNIT NO. 1 2: WORKMAN MIDALE VOLUNTARY UNIT NO. 2	2	ODD NUMBERED LSD.

DEVELOPMENT AND PRODUCING DATA - GAS POOLS

POOL NAME	WELLS CAPABLE OF PROD.	NO. OF WELLS PRODUCING	AVE. PROD. 10^3m^3/DAY/WELL (PEAK PROD.)	SPACING REGULATIONS (IN EFFECT ON DECEMBER 31, 1985)
BAYHURST VIKING GAS POOL	4	4	70.4	1 section drainage units
BAYHURST WEST VIKING GAS POOL	3	1	13.0	1 section drainage units
BEACON HILL MANNVILLE SAND GAS POOL	20	13	12.5	1 section drainage units
BEACON HILL WEST MANNVILLE SAND GAS POOL	7	7	31.1	1 section drainage units
BEVERLEY EAST CANTUAR GAS POOL	3	2	16.1	1 section drainage units
BIGSTICK SECOND WHITE SPECKS GAS POOL	72	62	13.3	1 section drainage units
BROCK EAST VIKING GAS POOL	3	0	0.0	1 section drainage units
BROCK VIKING SAND GAS POOL	6	2	6.3	1 section drainage units
BURSTALL MEDICINE HAT GAS POOL	6	6	1.3	1/4 section drainage units
BURSTALL MILK RIVER GAS POOL	5	5	2.6	1/4 section drainage units
BURSTALL MILK RIVER MEDICINE HAT GAS POOL	38	37	3.0	1/4 section drainage units
BURSTALL NORTH VIKING SAND GAS POOL	3	3	16.0	1 section drainage units
CAVALIER SPINNEY HILL SAND GAS POOL	3	2	17.6	1 section drainage units
COLEVILLE-SMILEY VIKING SAND GAS POOL	40	33	6.2	1 section drainage units
DODSLAND NORTH VIKING GAS POOL	27	27	4.1	1 section drainage units
FORT PITT MANNVILLE SAND GAS POOL	4	2	38.8	1 section drainage units
FORT PITT NORTH MANNVILLE SAND GAS POOL	3	3	41.5	1 section drainage units
GLIDDEN VIKING GAS POOL	3	2	18.1	1 section drainage units
GREENAN VIKING GAS POOL	15	12	2.3	1 section drainage units
GULL LAKE CANTUAR GAS POOL	6	1	3.7	1 section drainage units
HATTON MEDICINE HAT SAND GAS POOL	400	363	2.3	1 section drainage units or 1/2 section drainage units or 1/4 section drainge units or portions thereof, see pool regulations for details.
HATTON MILK RIVER GAS POOL	602	552	3.5	1 section drainage units or 1/2 section drainage units or 1/4 section drainge units or portions thereof, see pool regulations for details.
HATTON MILK RIVER - MEDICINE HAT GAS POOL	282	257	4.3	In accordance with the spacing regulations for the Hatton Milk River and Hatton Medicine Hat Gas Pools.
HOOSIER VIKING SAND GAS POOL	16	16	4.5	1 section drainage units
LIEBENTHAL MILK RIVER GAS POOL	93	91	0.6	1/4 section drainage units
LLOYDMINSTER COLONY SAND POOL	9	6	2.3	1/4 section drainage units
MARENGO VIKING GAS POOL	5	0	--	1 section drainage units
MILTON VIKING SAND GAS POOL	5	2	9.9	1 section drainage units
PIERCELAND MANNVILLE SAND GAS POOL	8	7	36.1	1 section drainage units
TANGLEFLAGS COLONY SAND GAS POOL	3	3	26.9	1 section drainage units
TANGLEFLAGS MCLAREN SAND GAS POOL	3	3	19.8	1 section drainage units
TANGLEFLAGS ST. WALBURG SAND GAS POOL	3	3	21.2	1 section drainage units
TANGLEFLAGS SECOND WHITE SPECKS GAS POOL	1	1	5.7	1 section drainage units
TOTNES VIKING GAS POOL	4	2	8.4	1 section drainage units
WHITESIDE VICTORIA SAND GAS POOL	3	3	11.2	1 section drainage units
WHITESIDE WEST VIKING SAND GAS POOL	8	8	2.0	1/2 section drainage units

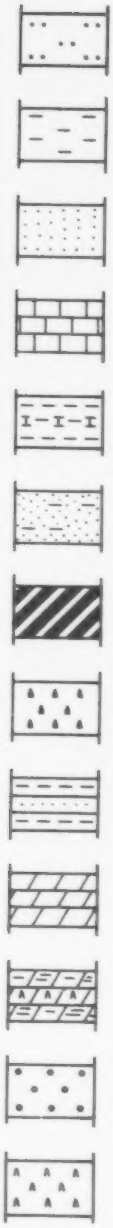
AREA SPACING DESCRIPTION*

SPACING AREA	DRAINAGE UNIT SIZE (No. of Lsds)	TARGET AREA	EXCEPTIONS
		- OIL AREAS -	
A	2	Odd numbered Lsds.	A well greater than 1 1/2 miles from a producer in the same zone may be drilled on the even or odd Lsd.
B	2	Even numbered Lsds.	A well greater than 1 1/2 miles from a producer in the same zone may be drilled on the even or odd Lsd.
C	4	Any quadrant of a quarter section	Wells drilled within a 9 section square area centred on the section of an existing oil well shall take on the spacing of this existing well. Wells drilled within a 9 section square area centred on the section of an existing well in an established oil pool shall take on the spacing of this pool.
D	2	Odd or even Lsds.	Wells drilled within a 9 section square area centred on the section of an existing oil well shall take on the spacing of this existing well. Wells drilled within a 9 section square area centred on the section of an existing well in an established oil pool shall take on the spacing of this pool
E	1	Southeast quadrant of any Lsd.	Wells drilled within a corridor of 1609 metres around an established oil pool shall take on the spacing of this pool. Applies only to wells drilled within the Mannville Group, Detrital, Bakken or Birdbear Formations.
		- GAS AREAS -	
G	16	Odd or even Lsds.	Wells drilled within a 9 section square area centred on a section that contains a gas well shall be drilled at least 500 metres from the sides of the drainage unit. Applies only to Mannville Formation.

* See the Oil and Gas Conservation Act & Regulations Thereunder for complete area spacing regulations.

TYPICAL WELL LOGS OF PRODUCING ZONES

LITHOLOGY LEGEND



Silt

Shale

Sandstone

Limestone

Calcareous shale

Argillaceous sandstone

Coal

Chert pebbles

Interbedded shale and sandstone

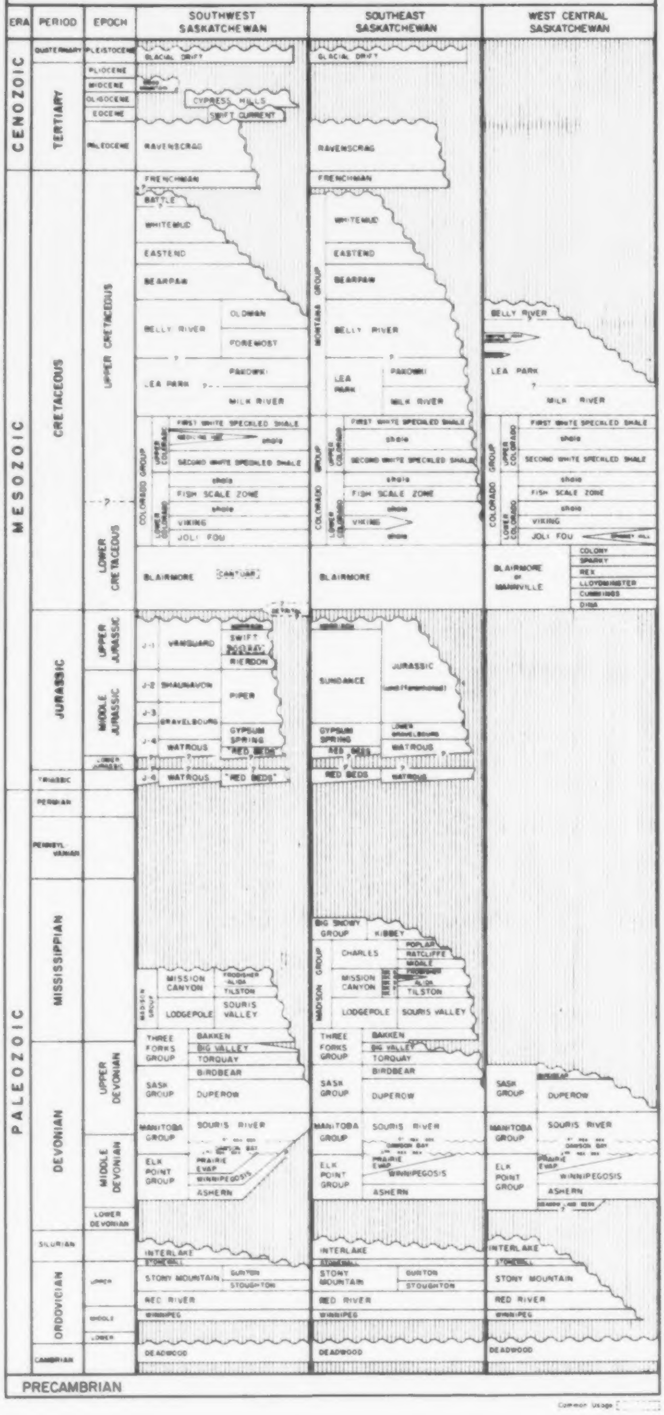
Dolomite or dolomitic limestone

Argillaceous and anhydritic dolomite

Oolitic

Anhydrite

STRATIGRAPHIC CORRELATION CHART
OF SASKATCHEWAN

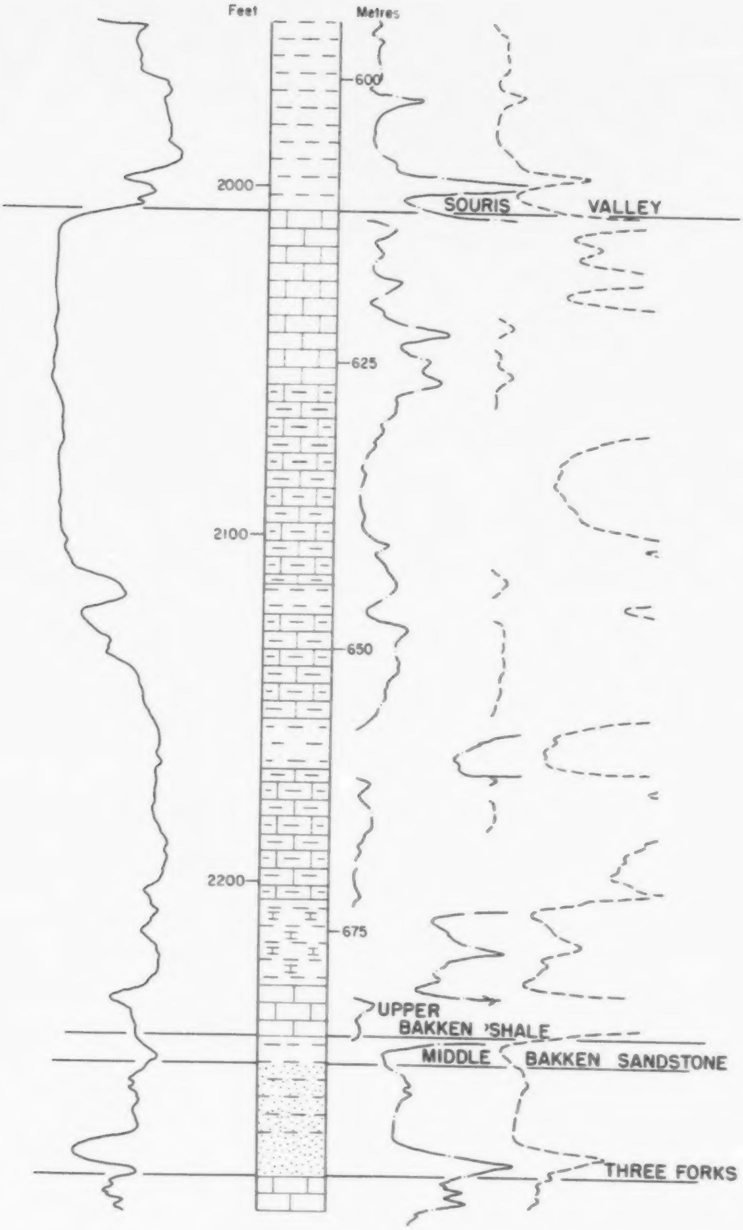


ERA
PERIOD
EPOCH
SOUTHWEST SASKATCHEWAN
SOUTHEAST SASKATCHEWAN
WEST CENTRAL SASKATCHEWAN
CENOZOIC
MESOZOIC
PALEOZOIC
QUATERNARY
TERTIARY
CRETACEOUS
JURASSIC
TRIASSIC
PERMIAN
PENNSYLVANIAN
MISSISSIPPIAN
DEVONIAN
SILURIAN
ORDOVICIAN
CAMBRIAN
PLEISTOCENE
PLIOCENE
MIOCENE
OLIGOCENE
EOCENE
PALEOCENE
UPPER CRETACEOUS
LOWER CRETACEOUS
UPPER JURASSIC
MIDDLE JURASSIC
LOWER JURASSIC
UPPER DEVONIAN
MIDDLE DEVONIAN
LOWER DEVONIAN
UPPER
MIDDLE
LOWER
GLACIAL DRIFT
CYPRESS HILLS
SWIFT CURRENT
RAVENSCRAG
FRENCHMAN
BATTLE
WHITEMUD
EASTEND
BEARPAW
MONTANA GROUP
BELLY RIVER
OLDMAN
FOREMOST
LEA PARK
PAKOWKI
MILK RIVER
COLORADO GROUP
UPPER COLORADO
LOWER COLORADO
FIRST WHITE SPECKLED SHALE
shale
SECOND WHITE SPECKLED SHALE
FISH SCALE ZONE
VIKING
JOLI FOU
BLAIRMORE
CANTUAR
BLAIRMORE or MANNVILLE
COLONY
SPARKY
REX
LLOYDMINSTER
CUMMINGS
DINA
J-1
VANGUARD
SWIFT
RIERDON
J-2
SHAUNAVON
PIPER
J-3
GRAVELBOURG
GYPSUM SPRING
J-4
WATROUS
"RED BEDS"
SUNDANCE
JURASSIC
LOWER GRAVELBOURG
RED BEDS
BIG SNOWY GROUP
KIBBEY
MADISON GROUP
CHARLES
POPLAR
RATCLIFFE
MIDALE
FROBISHER
ALIDA
MISSION CANYON
TILSTON
LODGEPOLE
SOURIS VALLEY
THREE FORKS GROUP
BAKKEN
BIG VALLEY
TORQUAY
SASK GROUP
BIRDBEAR
DUPEROW
MANITOBA GROUP
SOURIS RIVER
DAWSON BAY
ELK POINT GROUP
PRAIRIE EVAP
WINNIPEGOSIS
ASHERN
INTERLAKE
STONEWALL
STONY MOUNTAIN
GUNTON
STOUGHTON
RED RIVER
WINNIPEG
DEADWOOD
PRECAMBRIAN
Common Usage

HUDSON ROCANVILLE 4-4

4-4-16-31-W1

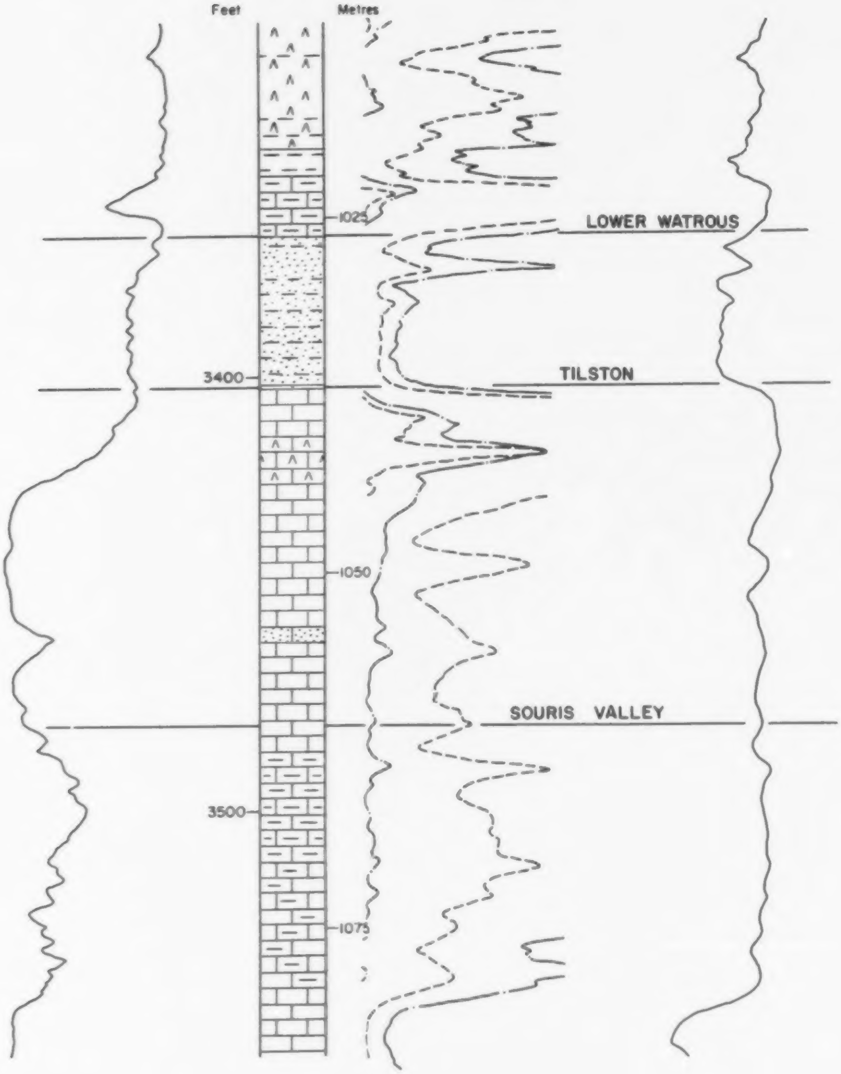
PRODUCING HORIZON : BAKKEN SAND


Feet
Metres
600
2000
SOURIS VALLEY
625
2100
650
2200
675
UPPER BAKKEN SHALE
MIDDLE BAKKEN SANDSTONE
THREE FORKS

ROYALITE PARKMAN 2-3

2-3-9-33-W1

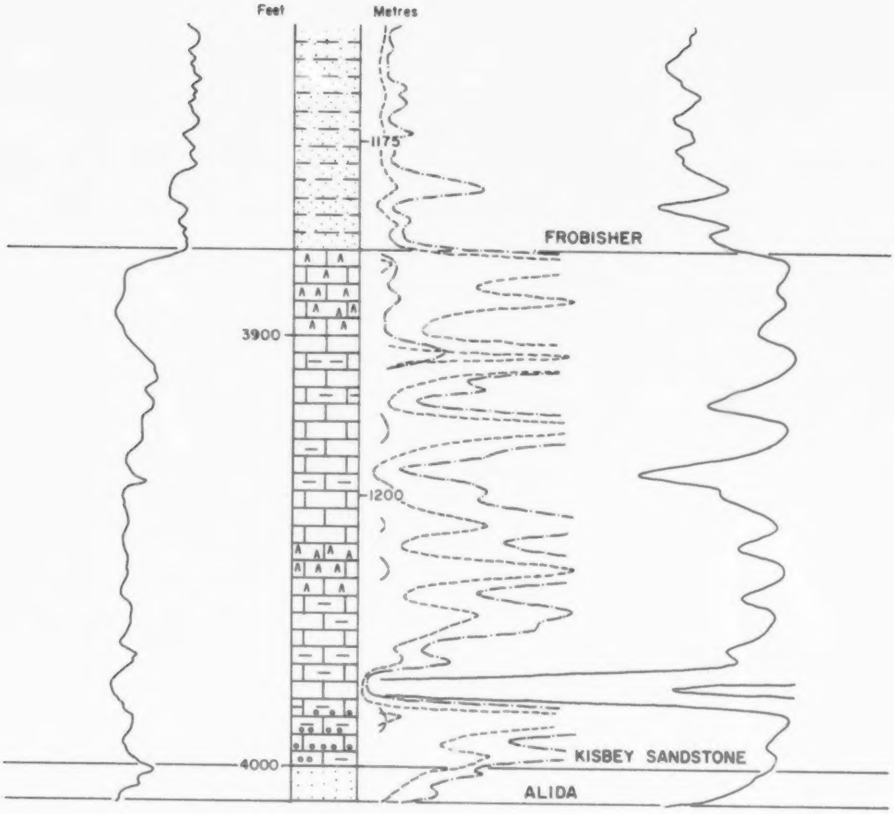
PRODUCING HORIZONS : TILSTON AND SOURIS VALLEY BEDS


Feet
Metres
1025
LOWER WATROUS
3400
TILSTON
1050
SOURIS VALLEY
3500
1075

MURPHY HASTINGS 7-24-4-34

7-24-4-34-W1

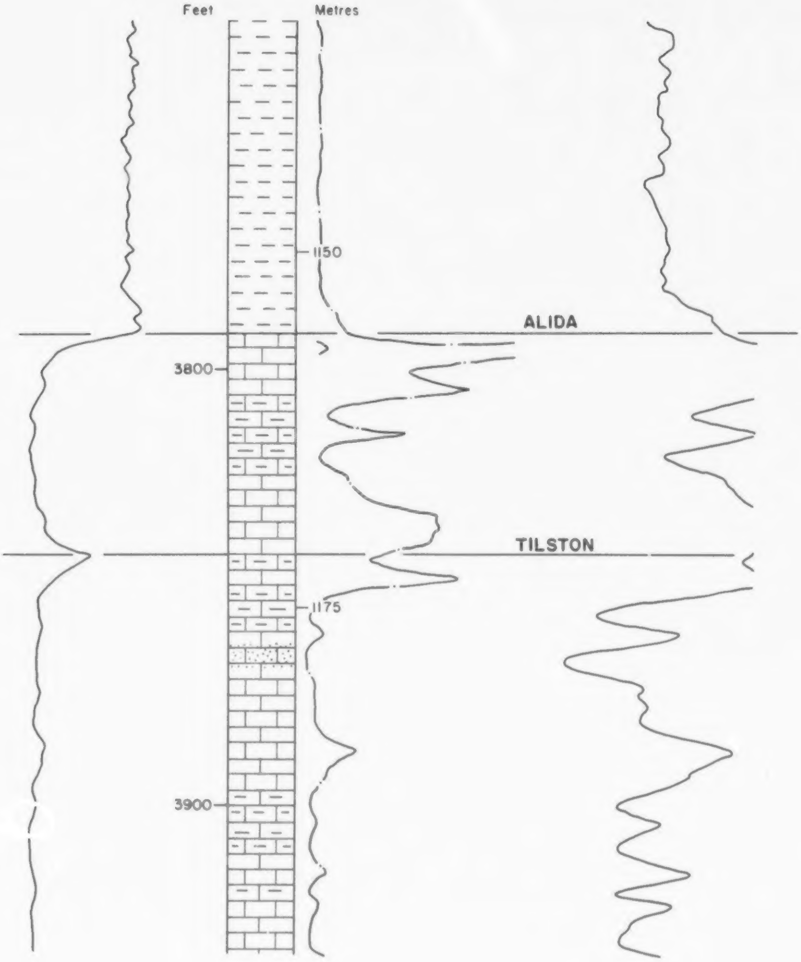
PRODUCING HORIZON : FROBISHER BEDS


Feet
Metres
1175
FROBISHER
3900
1200
KISBEY SANDSTONE
4000
ALIDA

SUN QUEENSDALE 2-13-6-1

2-13-6-1-W2

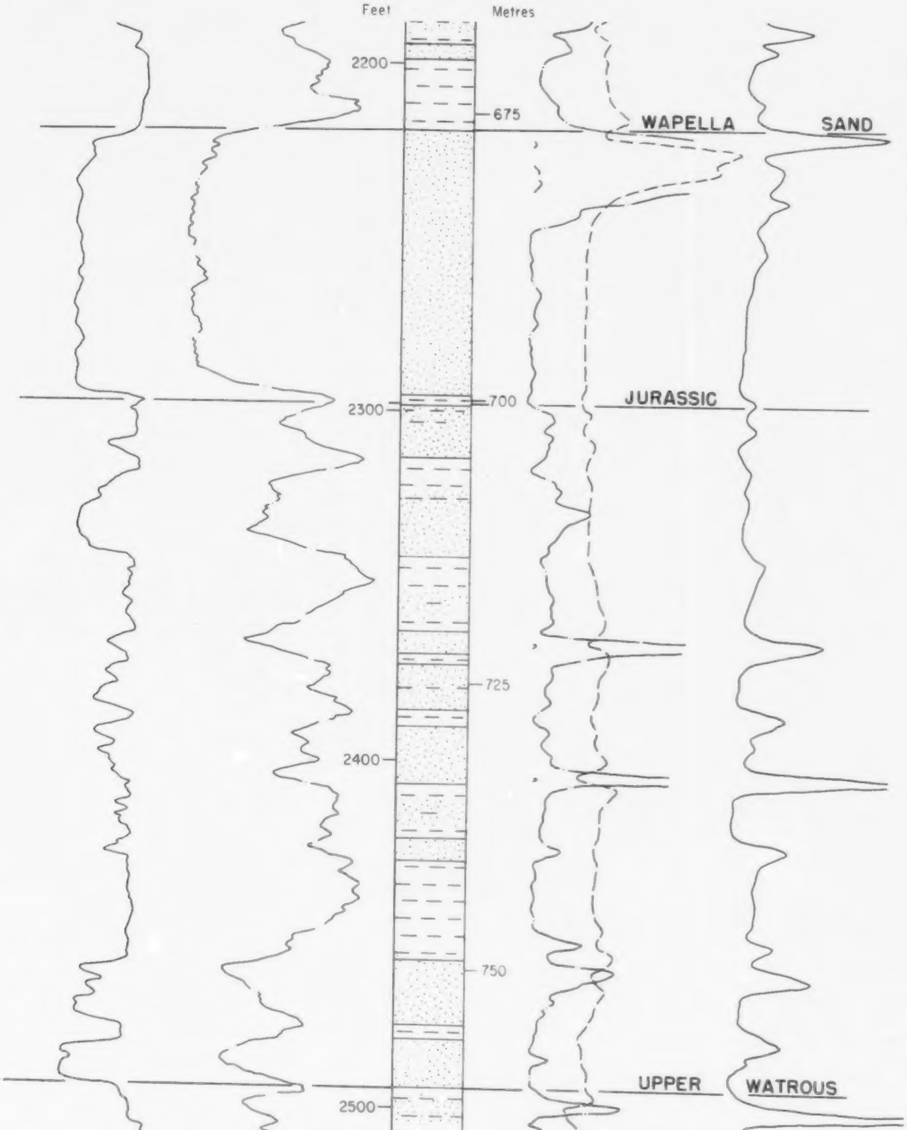
PRODUCING HORIZON : ALIDA BEDS


Feet
Metres
1150
ALIDA
3800
TILSTON
1175
3900

TIDEWATER WAPELLA 6-33

6-33-14-1-W2

PRODUCING HORIZONS : WAPELLA AND JURASSIC SANDS

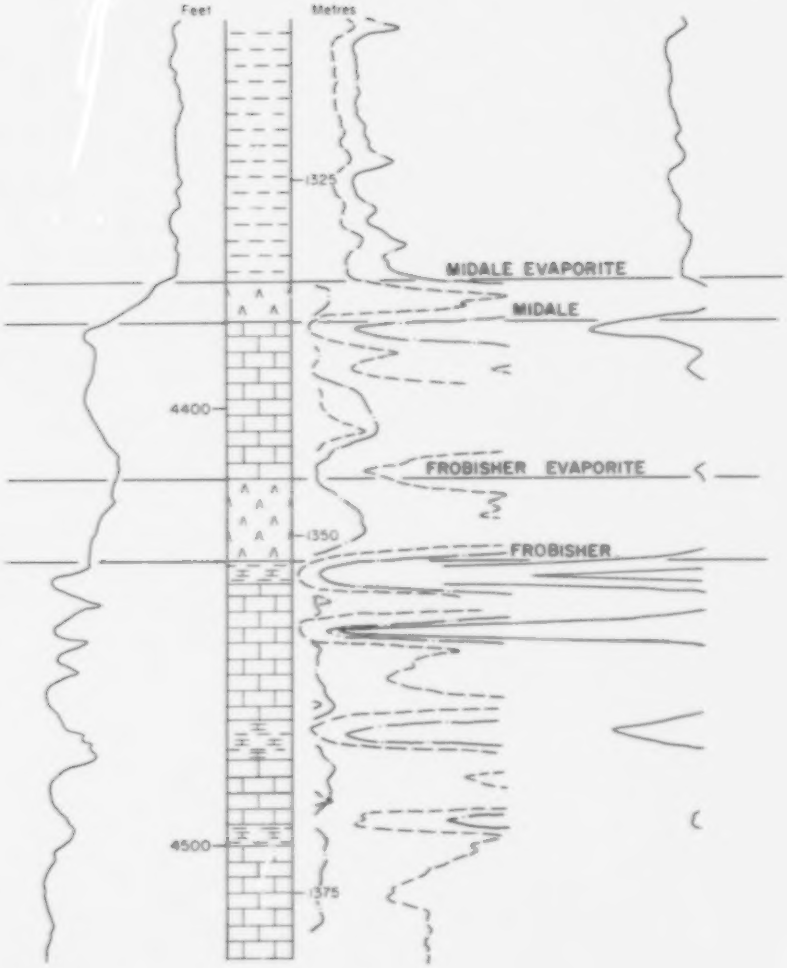


Feet
Metres
2200
675
WAPELLA SAND
2300
700
JURASSIC
725
2400
750
UPPER WATROUS
2500

PHOENIX et al STEELMAN 5-24-5-6

5-24-5-6-W2

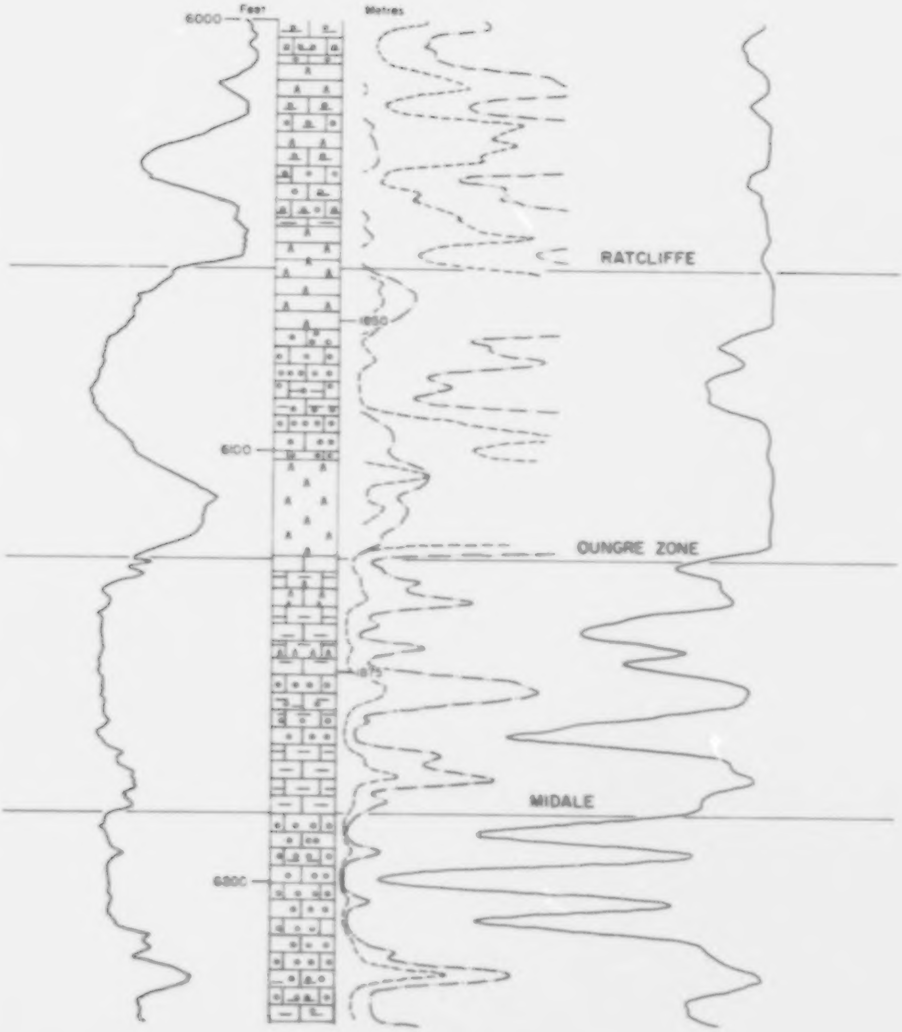
PRODUCING HORIZONS : MIDALE AND FROBISHER BEDS



CNEL CDR OUNGRE 9-24-2-15

9-24-2-15-W2

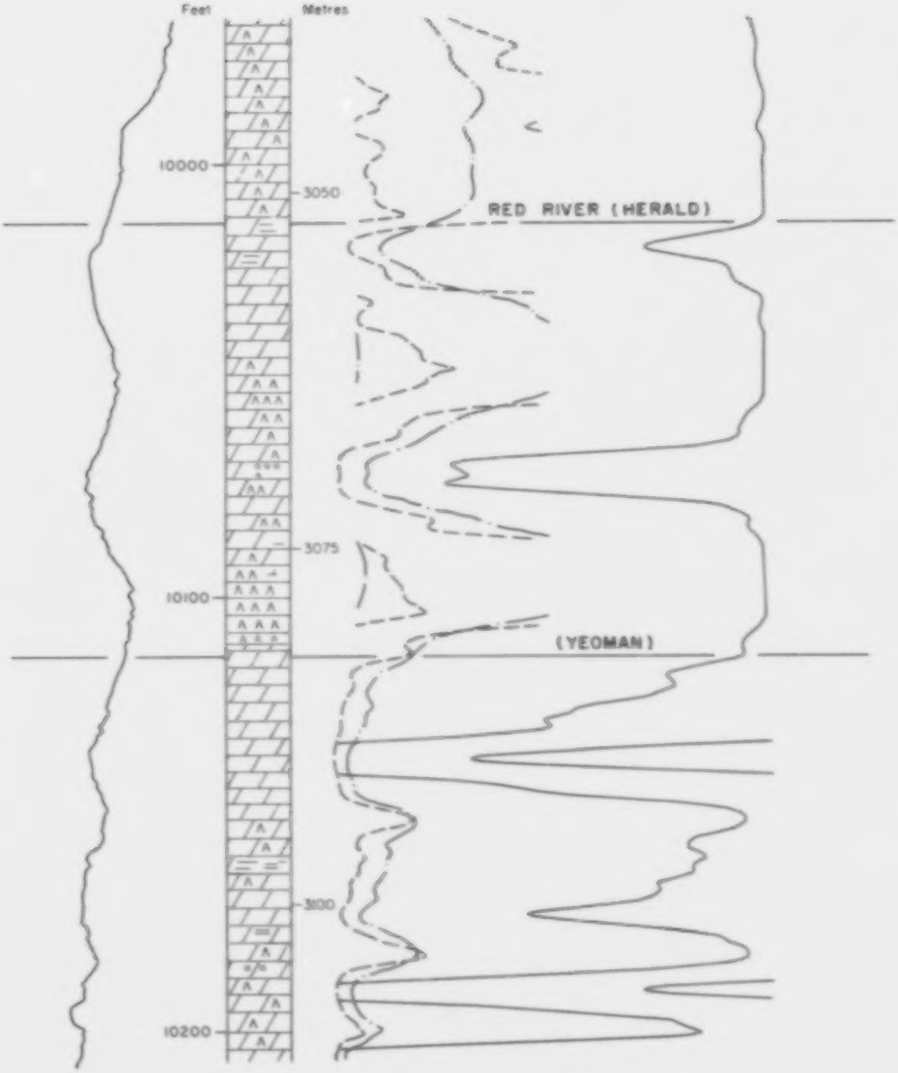
PRODUCING HORIZON : RATCLIFFE BEDS



C D R SCURRY S LAKE ALMA 1-14-1-17

1-14-1-17-W2

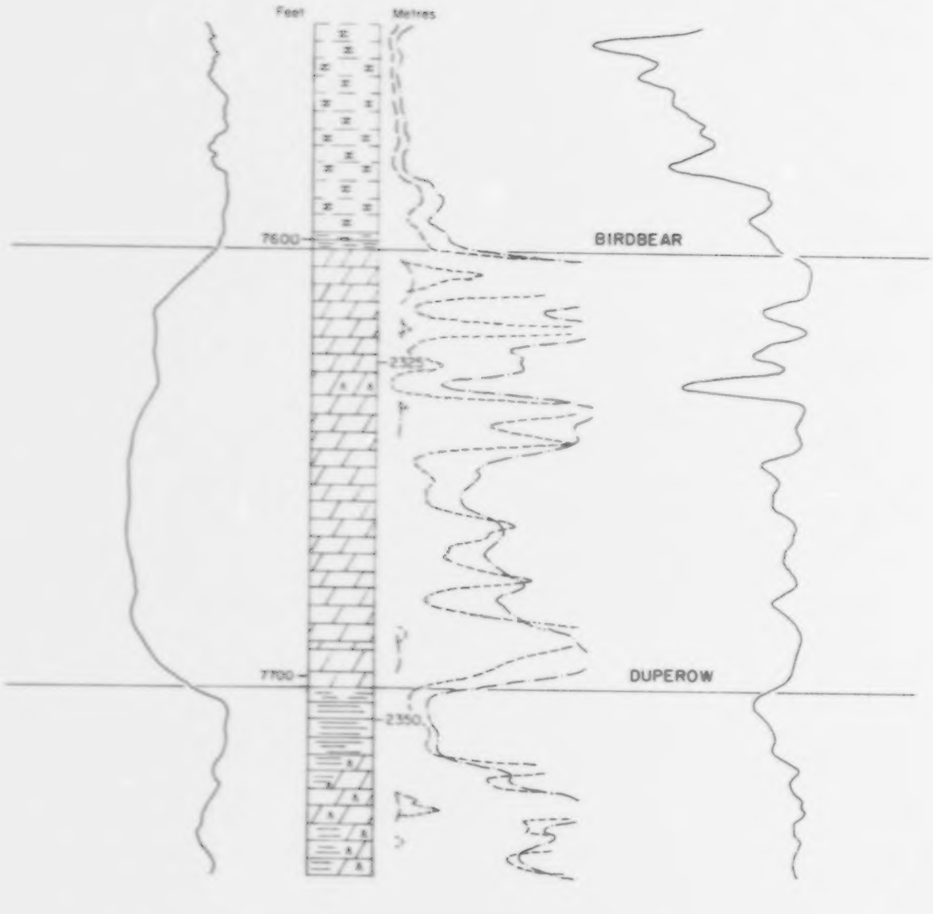
PRODUCING HORIZON : RED RIVER FORMATION



HB MIAMI HUMMINGBIRD 11-26-2-19

11-26-2-19-W2

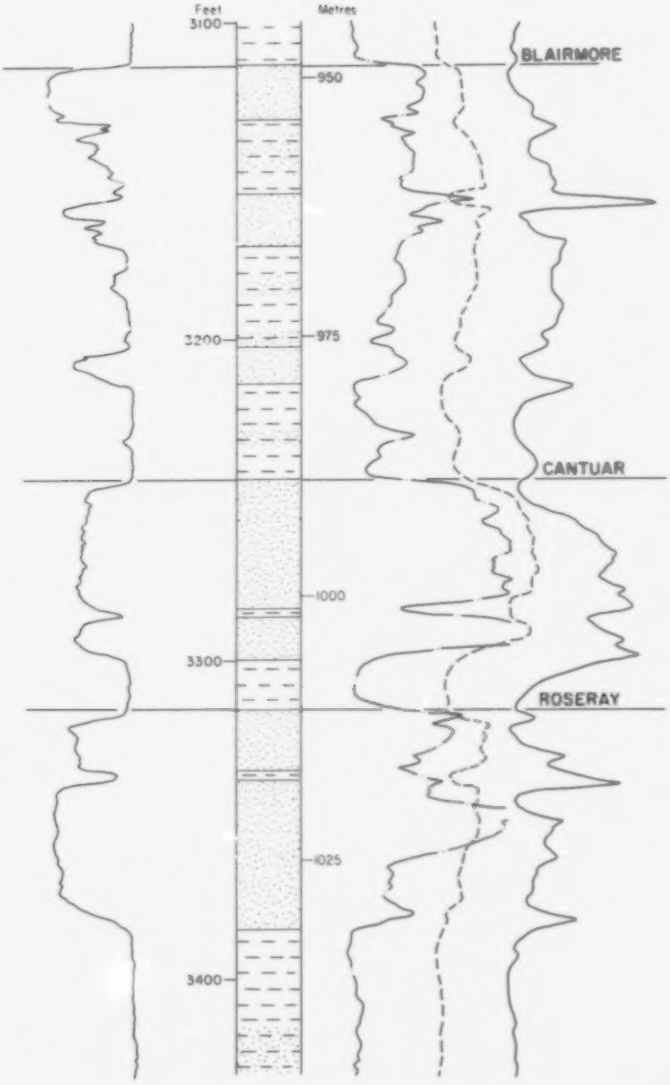
PRODUCING HORIZON : BIRDBEAR FORMATION


Feet
Metres
7600
BIRDBEAR
2325
7700
DUPEROW
2350

M.U.S. CANTUAR 5-2-16-17

5-2-16-17-W3

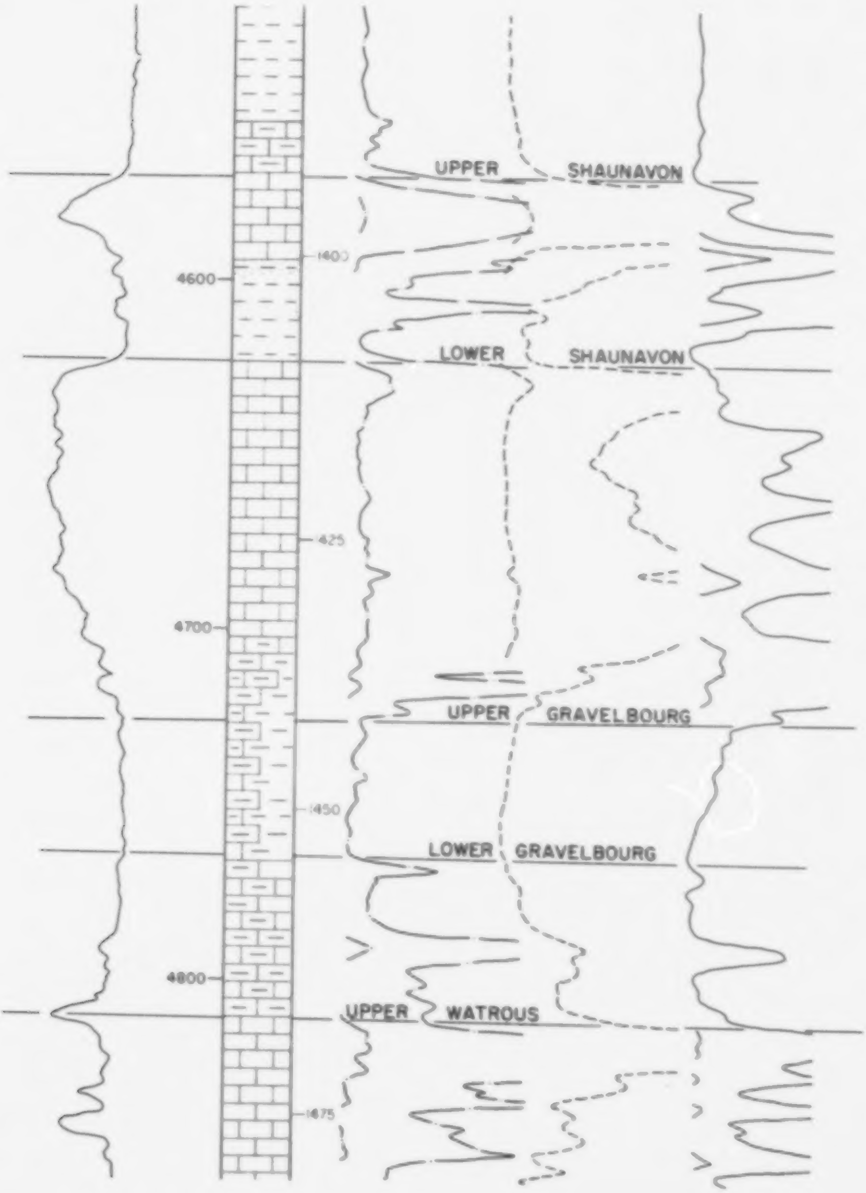
PRODUCING HORIZONS : CANTUAR AND ROSERAY SANDS



TIDEWATER INSTOW CROWN 11-33

11-33-9-18-W3

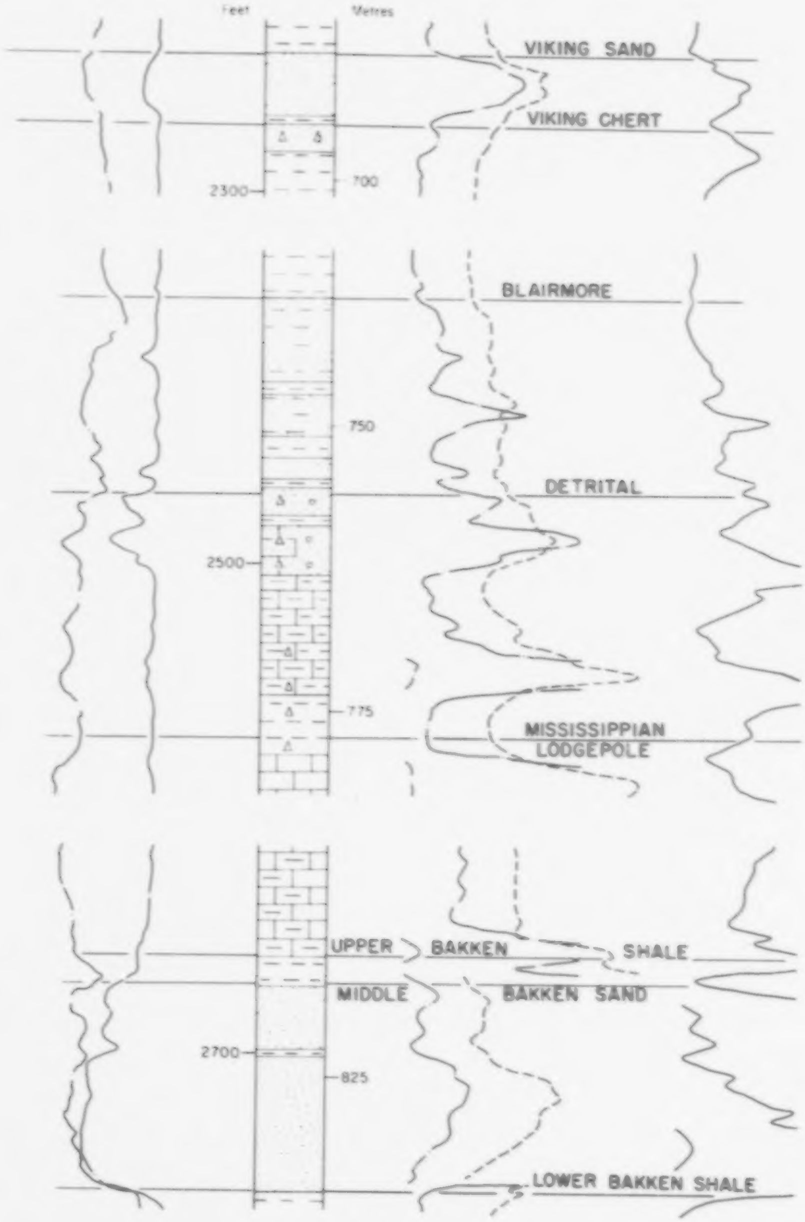
PRODUCING HORIZONS : UPPER AND LOWER SHAUNAVON FORMATIONS


UPPER SHAUNAVON
1400
4600
LOWER SHAUNAVON
1425
4700
UPPER GRAVELBOURG
1450
LOWER GRAVELBOURG
4800
UPPER WATROUS
1475

COLEVILLE UNIT 5-30-31-23

5-30-31-23-W3

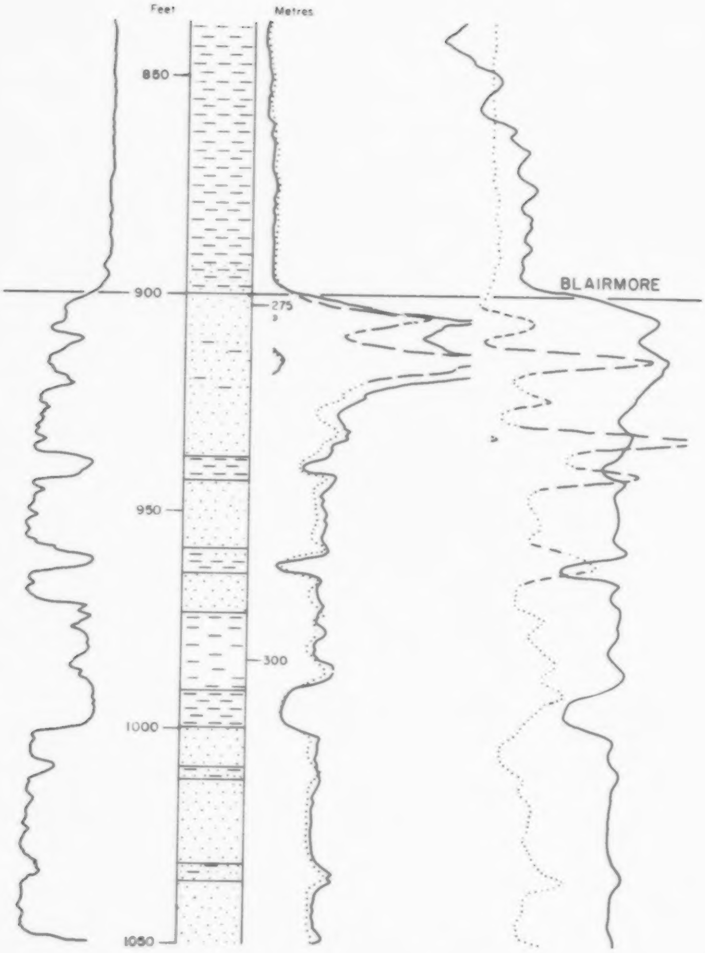
PRODUCING HORIZONS : VIKING AND MIDDLE BAKKEN SANDS


Feet
Metres
VIKING SAND
VIKING CHERT
2300
700
BLAIRMORE
750
DETRITAL
2500
775
MISSISSIPPIAN
LODGEPOLE
UPPER BAKKEN SHALE
MIDDLE BAKKEN SAND
2700
825
LOWER BAKKEN SHALE

SPC BEACON HILL 10-17-61-24

10-17-61-24-W3

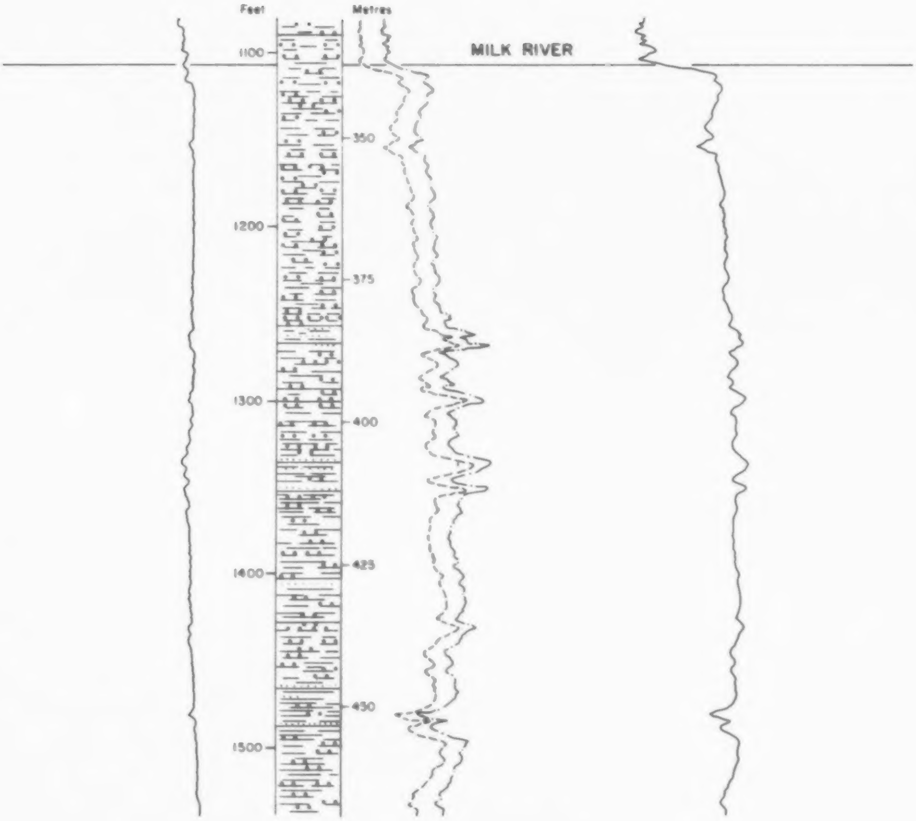
PRODUCING HORIZON : BLAIRMORE



PRECAM ET AL HATTON 11-21-17-25

11-21-17-25w3

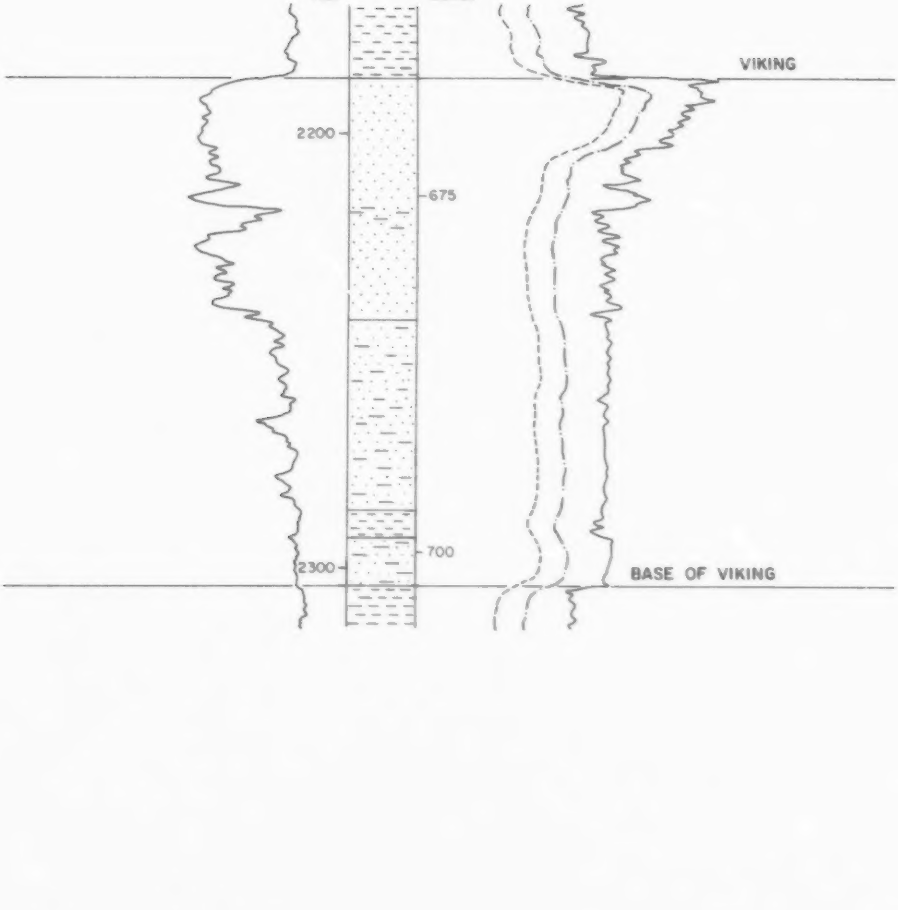
PRODUCING HORIZON : MILK RIVER SAND



IMP BAYHURST 11-19V-24-25

11-19-24-25-W3

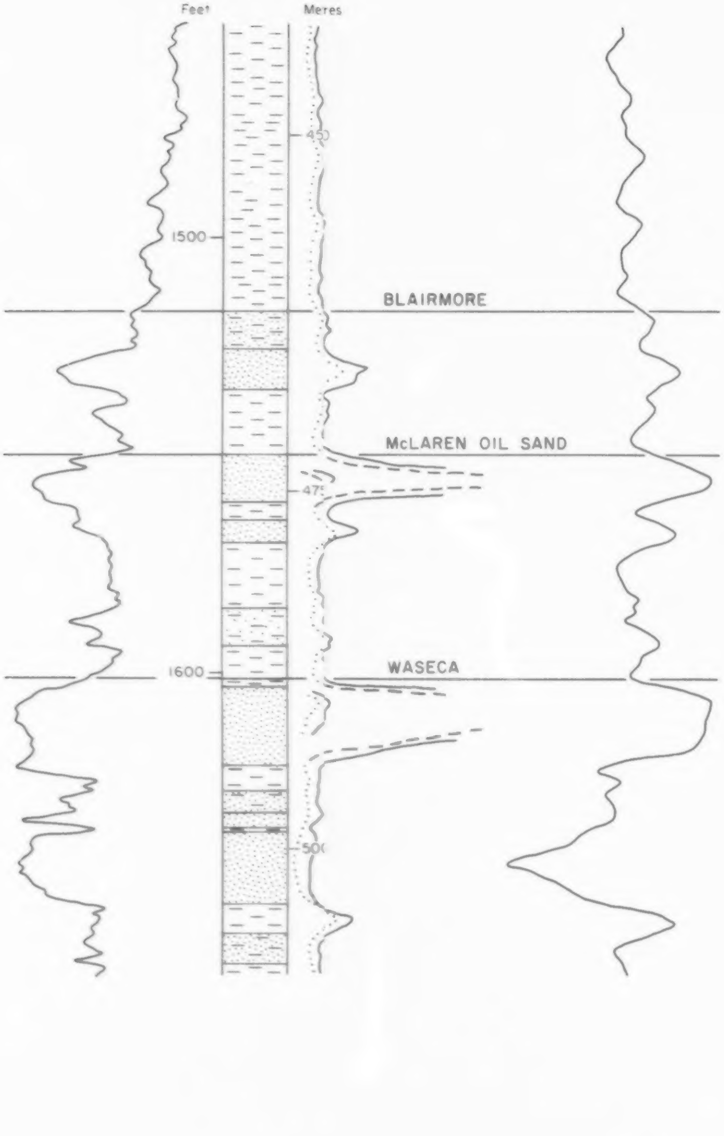
PRODUCING HORIZON : VIKING SAND


Feet
Metres
VIKING
2200
675
700
2300
BASE OF VIKING

HUSKY BIG GULLY C6-27-49-25

C6-27-49-25-W3

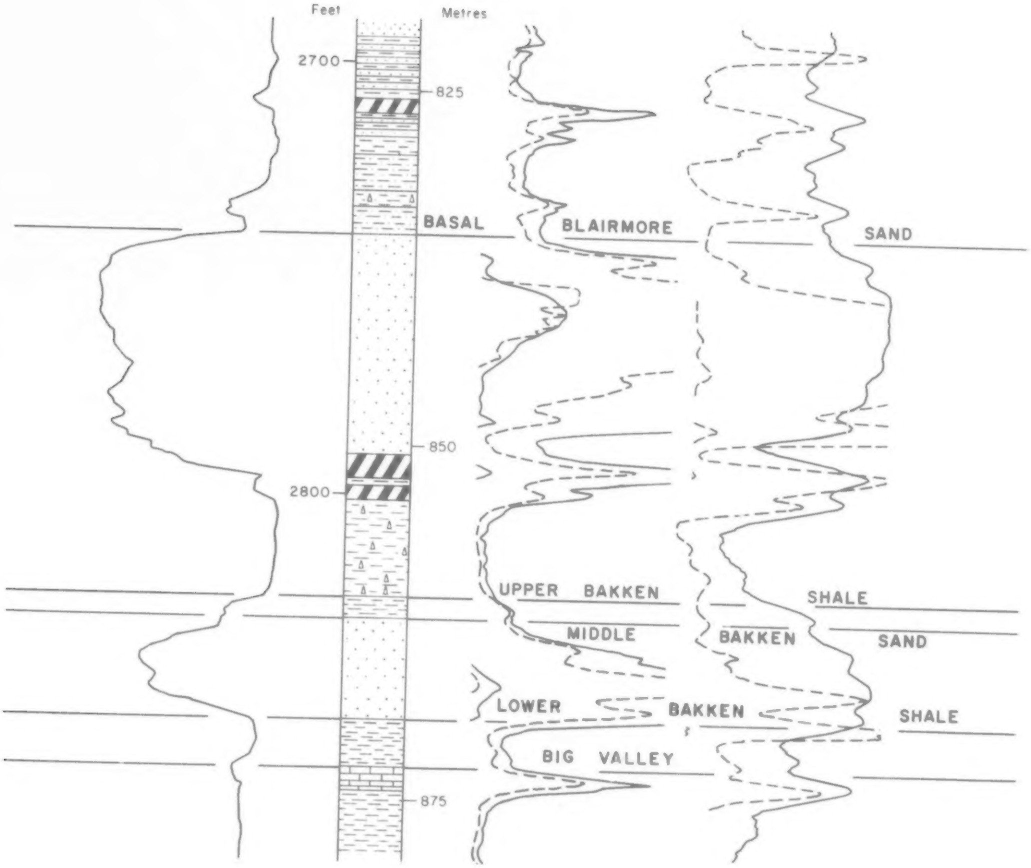
PRODUCING HORIZONS : McLAREN AND WASECA SANDS



HUSKY N. HOOSIER 6-14-32-27

6-14-32-27-W3

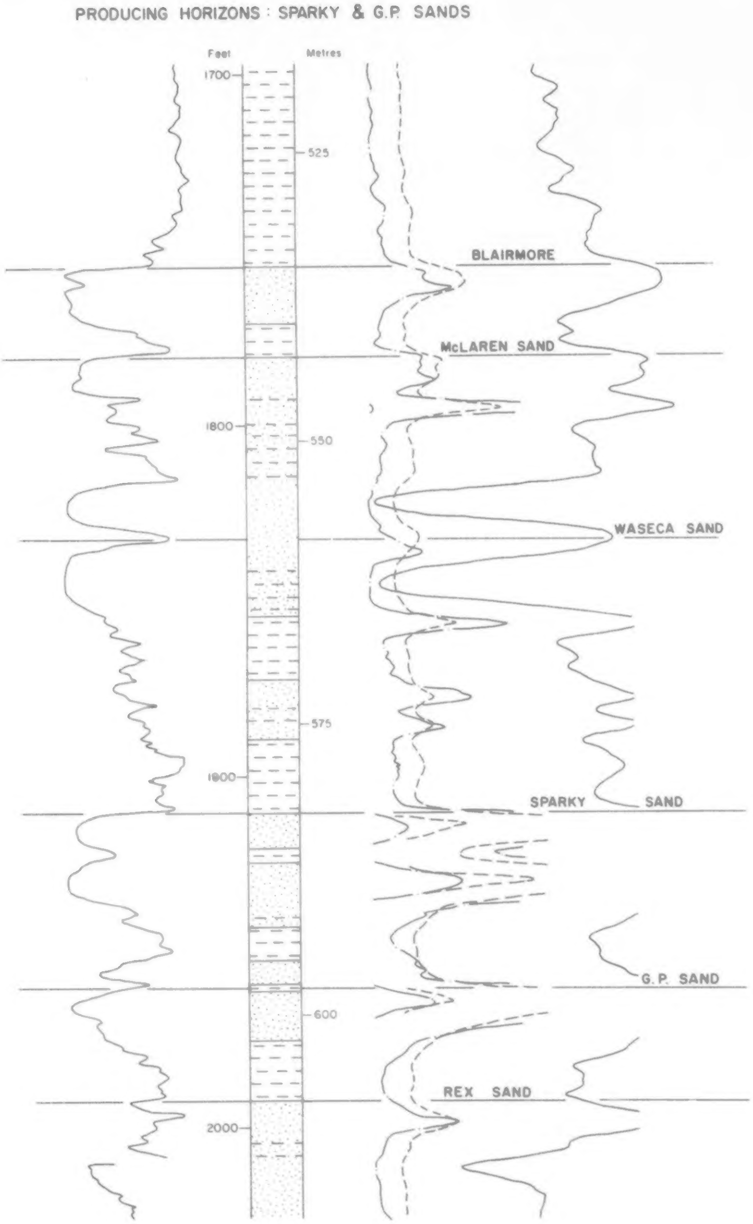
PRODUCING HORIZON : BASAL BLAIRMORE


Feet
Metres
2700
825
BASAL
BLAIRMORE
SAND
850
2800
UPPER BAKKEN
SHALE
MIDDLE
BAKKEN
SAND
LOWER
BAKKEN
SHALE
BIG VALLEY
875

CDN RES EPPING A14-30-47-27

14-30-47-27-W3

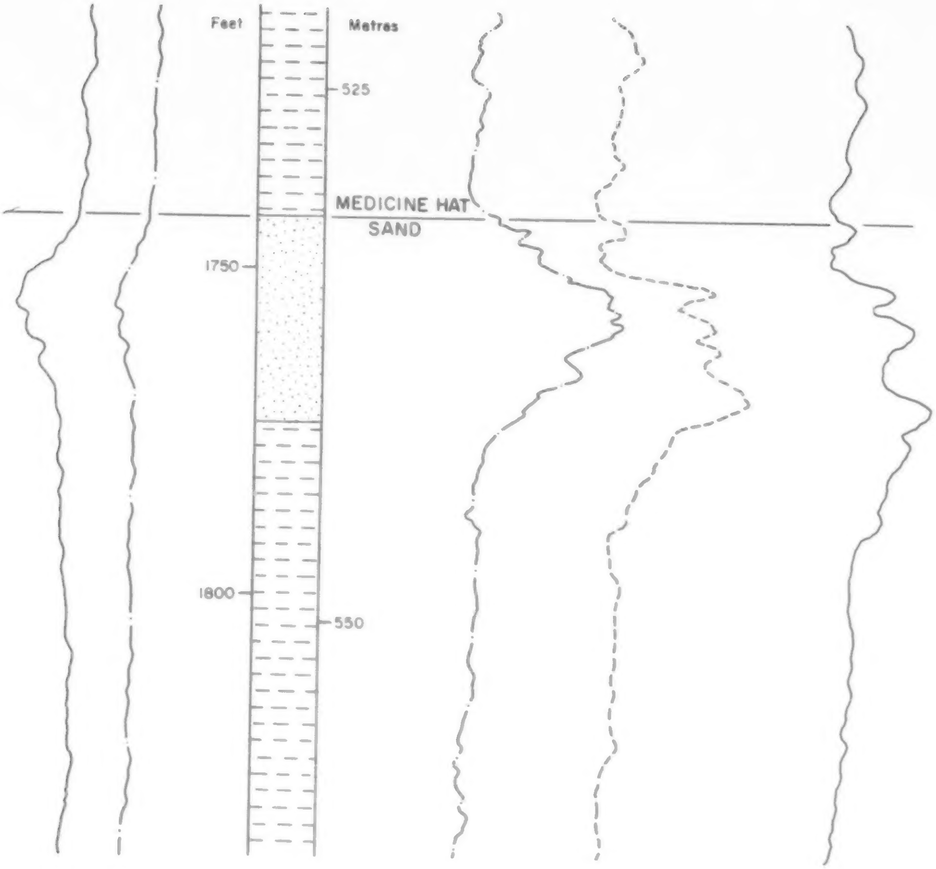
PRODUCING HORIZONS : SPARKY & G.P. SANDS



N C O HORSHAM 10-7-16-29

10-7-16-29-W3

PRODUCING HORIZON : MEDICINE HAT SAND



POOL PRESSURE DATA

POOL	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Aberfeldy Sparky Sand	+80.8				
Alameda Midale Beds:					
(Central Group)	792.5	7.24	57	15.39	10.64 MPa @ 57°C
(East Group)	746.8	7.24	57	15.27	10.80 MPa @ 57°C
Alameda West Frobisher Beds	786.6				
Alameda West Midale Beds	765.5				
Alida East Alida Beds	536.4	7.67	44	10.47	10.47 MPa @ 43°C
Alida West Alida Beds	545.6	7.67	45	10.54	10.54 MPa @ 45°C
Alsask Basal Blairmore Sand	91.4	9.27	33		
Antelope Lake Upper Shaunavon	300.2	8.82	49	10.00	
Arcola Frobisher-Alida Beds	570.0	8.37	53	11.00	8.77 MPa @ 53°C
Auburnton Frobisher - Alida Beds	607.7				
Avon Hill Viking	13.7	8.37	23	6.72	
Baldwinton Sparky Sand	+43.7				
Battrum North Roseray Sand	172.4				
Battrum Roseray Sand	179.8	8.82	46	8.56	1.39 MPa @ 43°C
Bench Upper Shaunavon	438.9	8.82		12.45	
Benson Midale Beds	754.4	7.92	68	14.38	
Beverley Cantuar Sand	243.8	9.05	48	9.11	9.11 MPa @ 48°C
Beverley North Cantuar Sand	232.9				
Beverley Upper Roseray Sand	246.9	8.78			
Bienfait Midale Beds	1005.7				
Big Gully McLaren Sand	+141.7				
Big Gully Waseca Sand	+125.0				
Bone Creek Upper Shaunavon	464.8	8.60	48	12.27	4.78 MPa @ 49°C
Bromhead Midale Beds	1098.0	8.60		17.65	
Browning Frobisher-Alida Beds	682.8	7.24	59	12.55	
Bryant Frobisher Beds	836.2				
Bryant Midale Beds	807.4				
Buffalo Coulee Bakken Sand	108.2	9.66			2.21 MPa @ 26°C
Buffalo Coulee North Bakken Sand	93.0				
Butte Upper Shaunavon	417.6	8.82	49	12.37	1.23 MPa @ 49°C
Buzzard Lloydminster Sand	+38.4				
Cactus Lake Basal Mannville Bakken Sand	97.1				
Cantal Frobisher-Alida Beds	579.1	6.79	47	10.87	10.85 MPa
Cantal South Frobisher-Alida Beds	579.1				
Cantuar Lower Roseray Sand	228.6	8.78	51	9.10	9.10 MPa @ 52°C
Cantuar East Cantuar Sand	228.6	8.60	51		
Cantuar East Roseray Sand	228.6	8.60	51		
Cantuar Main Cantuar Sand	227.1	8.78	51	8.95	8.95 MPa @ 52°C

POOL	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Carnduff Midale Beds	723.9	7.24	58	15.17	
Carnduff Frobisher Beds	752.9	7.24	59	12.98	
Celtic Sparky Sand	+118.9				
Celtic Waseca Sand	+140.2				
Clarilaw Frobisher-Alida Beds	623.3	7.24	58	11.78	
Clarilaw West Frobisher-Alida Beds	619.7				
Clintonville Shaunavon Pool	456.8				
Coleville Bakken Sand	109.7	9.50			
Coleville Mannville Sand	54.9				
Coleville South Bakken Sand	127.4				
Cosine Lake Lloydminster Sand	100.6				
Court Bakken Sand	129.8				
Covington Upper Shaunavon	416.1	8.82	52	11.94	3.52 MPa @ 51°C
Covington West Upper Shaunavon	417.6	8.82			
Crystal Hill Souris Valley Beds	434.3	8.37		9.19	
Dalesboro Frobisher-Alida Beds	670.6	8.37	56	12.00	
Dee Valley East Sparky Sand	+79.2				
Dee Valley East Waseca Sand	+102.1				
Dee Valley Waseca Sand	103.6				
Delta Upper Shaunavon	306.3	8.82	46	10.57	7.46 MPa @ 47°C
Dodsland Viking Sand	+4.6	7.99	23	6.41	6.41 MPa
Dollard Upper Shaunavon	434.3	8.60	59	11.80	6.32 MPa @ 60°C
Druid Mannville Sands	59.0				
Dulwich North Sparky Sand	+86.9				
Dulwich Sparky Sand	+79.2				
Eastbrook Upper Shaunavon	461.8	9.05	54	15.70	
Edam Waseca Sand	+119.2				
Edam West GP Sand	+93.2				
Edam West Mannville Sand	+109.9				
Edam West Sparky Sand	+92.2				
Edam West Waseca Sand	+115.6				
Edenvale Tilston Beds	533.4	7.69	43		
Elmore Midale Beds	685.8	7.69	52	14.33	
Elmore Frobisher Beds	701.0	7.92	52	12.05	6.83 MPa @ 51°C
Epping G.P. Sand	+57.9				
Epping Sparky Sand	+67.1				
Eureka Viking	18.3	7.99	23	6.12	4.43 MPa @ 26°C
Eyehill Cummings Sand	89.9				
Fertile Tilston Beds	437.0				

POOL	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Flat Lake Ratcliffe Beds	1271.0	8.37	73	20.15	9.80 MPa @ 81°C
Florence Frobisher Beds	789.4	8.37	57	13.28	
Forest Bank Mannville Sands	+115.8				
Forest Bank Sparky Sand	+99.1				
Forest Bank Waseca Sand	+120.4				
Fosterton Roseray Sand:					
Middle (II) Roseray Sand	221.0	8.82	52	9.10	
Lower (I) Roseray Sand	221.0	8.82	52	9.10	
Northwest Group	218.5	8.82	52		
Freda Lake Ratcliffe Beds	960.1	8.37		18.56	
Freemont Sparky Sand	+43.8				
Freemont Waseca Sand	+62.5				
Freestone Frobisher-Alida Beds	570.0	7.92	54	11.29	
Frys Tilston-Souris Valley Beds	402.3	8.37			
Furness Sparky Sand	+73.2				
Fusilier Bakken Sand Pool	121.9	9.27			
Gainsborough Frobisher-Alida Beds	579.1	7.24	44		
Glen Ewen Midale Beds	728.5	7.24	56	15.17	
Glen Ewen Frobisher Beds	751.3	7.24	56		
Golden Lake North Sparky Sand	+96.0				
Golden Lake North Waseca Sand	+121.9				
Golden Lake South Sparky Sand	+96.0				
Golden Lake South Waseca Sand	+115.8				
Griffin Frobisher Beds Pool	690.4	8.60	62		
Gull Lake Basal Cantuar Sand	300.2	8.82	47		8.79 MPa @ 47°C
Gull Lake Central Upper Shaunavon	387.1	8.82	51		
Gull Lake North Upper Shaunavon	365.8	8.82	48	11.11	1.10 MPa @ 46°C
Gull Lake South Upper Shaunavon	402.3	8.82	52	11.71	
Gully Lake Waseca Sand	+103.6				
Handsworth Alida Beds	536.4	8.60	51	10.99	
Hartaven Frobisher-Alida Beds	577.6	8.60	56	11.58	
Hastings East Frobisher Beds	598.7				
Hastings Frobisher Beds	643.1	6.79	49	11.65	11.65 MPa
Hazelwood Tilston Beds	425.2	8.37	43	9.53	
Hazlet Roseray Sand	205.7	9.05	47	9.13	5.60 MPa @ 47°C
Hearts Hill Bakken Sand	64.9				
Hoffer Ratcliffe Lower Beds	1248.2	8.60		19.47	
Hoffer Ratcliffe Upper Beds	1231.4	8.60		19.33	
Hoosier Bakken Sand Pool	150.9	9.50			

POOL	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Hume Frobisher Beds	739.1	8.60	64	13.21	
Hume Midale Beds	723.9	8.60		14.23	
Hummingbird Birdbear	1585.0	8.14	82	23.16	8.09 MPa @ 82°C
Hummingbird Ratcliffe Beds	1155.2	8.60	71	18.70	6.03 MPa @ 71°C
Huntoon Frobisher Beds	754.4	8.60	61		
Huntoon Midale Beds	737.6	8.60	55		
Illerbrun Upper Shaunavon	414.5	8.82	49	11.86	3.15 MPa @ 49°C
Ingoldsby Frobisher-Alida Beds	548.6	7.89	46	10.51	4.81 MPa @ 45°C
Innes Frobisher Beds	719.3	8.60	63	12.98	7.78 MPa @ 61°C
Instow Upper Shaunavon	464.8	8.60	48	12.27	4.78 MPa @ 49°C
Java Cantuar Sand	242.3				
Johnston Upper Shaunavon	371.9	8.82	48	9.24	
Kenosee Tilston Beds	426.7	7.92	46	9.38	
Kerrobert Viking Sand	3.0				
Kisbey Birdbear Pool	1018.3				
Lake Alma Ratcliffe Beds	1268.0	8.37	67	20.27	
Landrose McLaren Sand	+144.8				
Landrose Waseca Sand	+129.5				
Lashburn South Sparky Sand	+93.7				
Lashburn South Waseca Sand	+117.3				
Lashburn Waseca Sand	+126.5				
Lashburn West Sparky Sand	+81.4				
Leitchville Shaunavon	452.6	8.60	50	12.51	4.78 MPa @ 49°C
Leon Lake Shaunavon	457.2	8.60	52	10.69	5.52 MPa @ 41°C
Lightning Tilston Beds	449.6	7.92	46	9.39	
Lloydminster Sparky Sand	+83.8				
Lone Rock Sparky Sand	+71.6				
Lost Horse Hill Frobisher-Alida Beds	559.3	8.14	57	11.40	3.36 MPa @ 55°C
Lougheed Midale Beds	807.7	8.14	61		
Loverna Detrital	126.5	8.60			
Low Lake Waseca Sand	+111.3				
Lucky Hills Viking	7.6	8.37			
Luseland Bakken Sand	44.9				
Macklin Sparky Sand	39.6				
Macoun Midale Beds	946.4	8.82	63		9.32 MPa @ 63°C
Macoun West Midale Beds	978.3				
Maidstone McLaren Sand	+126.1				

POOL	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH oC	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Maidstone Waseca Sand	+113.4				
Main Success Roseray Sand	225.6	8.60	50	9.06	8.67 MPa @ 59°C
Manito Lake Sparky Sand	+27.7				
Marsden South Sparky Sand	+31.7				
Marsden Sparky Sand	+36.1				
Melrose Frobisher-Alida Beds	551.7	8.14	54		
Midale Central Midale Beds	800.1	7.92	63	14.31	6.09 MPa @ 63°C
Midale Central Frobisher Beds	786.4	7.69	63	14.31	5.24 MPa @ 57°C
Minard Midale Beds	738.5				
Moose Mountain Tilston Beds	435.9	8.48	46	9.45	3.14 MPa @ 41°C
Moose Valley Tilston Beds	428.2	8.60			
Morrisview Frobisher-Alida Beds	661.4	8.37	48	12.37	
Neilburg McLaren Sand	+103.9				
Neptune Ratcliffe Beds	1034.8	8.37			
North Antler Midale Beds	658.4	8.14	56	13.98	
Northgate Frobisher Beds	1033.3	8.14	63		
Northgate Midale Beds	1021.1	7.24	71	18.03	14.48 MPa @ 70°C
North Handsworth Alida Beds	538.0	8.60	55	11.08	
North Hoosier Bakken Sand	135.3	9.50	31	7.74	7.79 MPa @ 31°C
North Hoosier Basal Blairmore Sand	120.4	9.34	29	5.85	
Northminster North G.P. Sand	+83.2				
Northminster North Sparky Sand	+94.1				
Northminster Sparky Sand	+91.4				
North Premier Roseray Sand	228.6	8.60	47	9.25	3.12 MPa @ 47°C
North Premier Upper Shaunavon	310.9	8.82	57	10.31	0.89 MPa @ 49°C
North Smiley Bakken Sand	97.0				
Nottingham Alida Beds	548.6	7.15	43	10.60	10.66 MPa @ 44°C
Oakley Frobisher Beds	582.2	6.72	46	10.95	10.95 MPa
Oungre Ratcliffe Beds	1188.7	8.14	70	18.96	8.07 MPa
Parkman Souris Valley Beds	416.1	8.37	49	9.09	
Parkman Tilston Beds	442.0	7.92	43	9.51	2.79 MPa @ 43°C
Parkman Tilston-Souris Valley Beds	402.3	7.92	38	9.10	2.41 MPa @ 38°C
Parkman South Tilston-Souris Valley	455.7	8.23	38	9.45	
Pennant Upper Shaunavon	265.2	9.05			
Pikes Peak G.P. Sand	+81.0				
Pikes Peak Sparky Sand	+91.4				
Pikes Peak Waseca Sand	+123.4				
Pinto Midale Beds	1024.1	7.01	70	17.24	13.85 MPa @ 70°C
Pinto Frobisher Beds	1036.3	7.01	66	16.55	

POOL	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Plato North Viking Sand	20.8				
Plato Viking Sand	9.1	8.37	24	6.89	3.28 MPa @ 21°C
Plover Lake Bakken Sand	86.6				
Queensdale East Frobisher-Alida Beds	573.0	5.78	47	10.84	7.72 MPa @ 46°C
Queensdale North Alida Beds	588.3	7.58	49	10.85	
Queensdale West Alida Beds	600.5	7.58	48	11.25	11.24 MPa @ 48°C
Ralph Midale Beds	723.9	7.92			
Rapdan Upper Shaunavon	449.6	8.60	49	13.72	5.61 MPa @ 56°C
Red Jacket Shaunavon Pool	82.7				
Rocanville Bakken Sand	160.0	8.37	27	6.23	
Roncott Bakken Sand	1121.7	8.08	59		2.05 MPa @ 52°C
Rosebank Alida Beds	536.4	7.19	44	10.49	
Rosebank South Alida Beds	533.4	7.46	43		
Rush Lake Sparky Sand	+88.3				
Rush Lake Waseca Sand	+113.9				
Senlac Lloydminster Sand	78.2				
Sherwood Frobisher Beds	701.0	7.92	56	12.27	8.76 MPa @ 56°C
Silverdale Sparky Sand	+68.6				
Silverton Frobisher Beds	618.7	8.37	49		
Skinner Lake Ratcliffe Beds	1008.9	8.37			
Smiley Dewar Viking Sand	15.2	7.99	23	6.47	6.36 MPa
Smiley Dewar Viking Chert	18.3	7.99	23	6.49	
Souris Flat Frobisher Beds	789.4	8.28	59	13.34	11.82 MPa @ 59°C
South Fletwode Tilston Beds	429.8	7.92	44	9.45	
South Success Roseray Sand	231.0	8.60	51	8.96	8.96 MPa @ 53°C
Standard Hill Waseca Sand	+109.7				
Star Valley Frobisher-Alida Beds	536.4	7.46	52	10.82	8.61 MPa @ 52°C
Steelman Midale Beds	853.4	7.01	67	14.34	14.34 MPa
Steelman Frobisher Beds	853.4	7.01	67	14.36	
Storthoaks Alida-Tilston Beds	493.8	7.92	38	9.80	8.09 MPa @ 42°C
Stoughton Frobisher-Alida Beds	644.7	7.46	61	12.07	8.09 MPa @ 62°C
Stoughton South Frobisher Beds	647.7	7.46		14.13	
Success North Roseray Sand	236.9				
Success Roseray Sand Alpha	219.5	8.60	51	8.76	7.86 MPa @ 51°C
Suffield Roseray Sand	259.1	8.60	52	12.98	7.41 MPa @ 44°C
Suffield Upper Shaunavon	318.5	8.82	50	10.82	
Tangleflags East McLaren Sand	+139.6				
Tangleflags G.P. Sand	+100.6				

POOL	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Tangleflags Lloydminster Sand	+61.0				
Tangleflags McLaren Sand	+141.4				
Tangleflags North Cummings SAnd	+50.3				
Tangleflags North G.P. Sand	+99.1				
Tangleflags North Lloydminster Sand	+51.8				
Tangleflags Sparky Sand	+109.7				
Tangleflags West G.P. Sand	+102.9				
Tangleflags West Lloydminster Sand	+62.4				
Tangleflags West Sparky Sand	+113.5				
Tatagwa Midale Beds	857.4				
Verlo Roseray Sand	213.4	8.82	52	9.14	9.24 MPa @ 39°C
Viewfield Frobisher Beds	670.6	8.69	65	12.22	9.03 MPa @ 65°C
View Hill Midale Beds	957.1	8.75	76	15.69	
Wapella Sand	76.2	8.37	32	5.25	0.34 MPa @ 29°C
Warmley Alida Beds	496.2	8.37	54	10.15	
Wauchope Alida-Tilston Beds	524.1				
Weir Hill Frobisher Beds	762.0	7.24			
Westhazel G.P. Sand	+90.1				
Westhazel Sparky Sand	+103.8				
West Innes Frobisher Beds	722.4	8.60	64	13.07	
West Kingsford Midale Beds	876.3	7.01	67	14.82	9.40 MPa @ 67°C
Weyburn Frobisher Beds	807.7	8.14	61		
Weyburn Midale Beds	807.7	8.14	61	14.60	
Weyburn North Frobisher Beds	787.1				
Weyburn North Midale Beds	766.9				
White Bear Tilston Beds	445.0	7.92	43	9.74	
White Bear Tilston-Souris Valley Beds	457.2	8.37	39	9.47	2.41 MPa
Whitemud Upper Shaunavon	469.4	9.05	54	13.79	5.52 MPa @ 41°C
Whiteside Viking Sand	36.6	7.92	24	6.38	
Wildwood Alida Beds	582.2	8.37	48	10.77	
Willmar Frobisher Alida Beds	661.4	7.24	54	11.87	11.32 MPa @ 53°C
Winmore Frobisher Beds	641.6	8.60		11.23	
Winter Cummings Sand	36.9				
Workman Midale Beds	685.8	7.24	54	14.75	7.64 MPa @ 53°C
Workman Frobisher Beds	701.0	7.69	54	12.27	6.55 MPa @ 59°C

INITIAL GAS POOL PRESSURE DATA

POOL	DATUM (METRES SUBSEA)	TEMPERATURE AT DATUM DEPTH (°C)	PSEUDO-REDUCED TEMPERATURE	PSEUDO-REDUCED PRESSURE	VIRGIN PRESSURE AT DATUM DEPTH (kPa)
Bayhurst Viking Gas Pool	+9.1	25	1.61	1.47	6700
Bayhurst West Viking Gas Pool	-7.6	28	1.60	1.47	6720
Beacon Hill Mannville Sand Gas Pool	+256.0	21	1.56	0.47	2170
Beacon Hill West Mannville Sand Gas Pool	+241.7	21	1.56	0.46	2351
Beverley East Cantuar Gas Pool	+170.0	46	1.67	2.11	9650
Bigstick Second White Specks Gas Pool	+101.2	26	1.59	0.46	6105
Brock Viking Sand Gas Pool	-3.0	28	1.59	1.46	6690
Brock East Viking Gas Pool	-7.6	29	1.62	1.55	7060
Burstall Medicine Hat Sand Gas Pool	+231.5	17	1.53	0.94	4309
Burstall Milk River Gas Pool	+278.8	16	1.53	0.75	3447
Burstall North Viking Sand Gas	-11.0	27	1.61	1.47	7431
Cavalier Spinney Hill Sand Gas Pool	+162.1	18	1.60	0.70	3140
Coleville-Smiley Viking Sand Gas Pool	+12.2	24	1.50	1.40	6480
Dodsland North Viking Gas Pool	+21.3	23	1.50	1.33	6110
Fort Pitt Mannville Sand Gas Pool	+191.0	20	1.79	0.61	2790
Fort Pitt North Mannville Sand Gas Pool	+198.9	19	1.77	0.62	2850
Glidden Viking Gas Pool	-1.5	22	1.57	1.47	6690
Greenan Viking Gas Pool	-15.2	28	1.61	1.45	6580
Gull Lake Cantuar Gas Pool	-259.1	43	1.59	2.05	9480
Hatton Medicine Hat Sand Gas Pool	+274.3	17	1.53	0.94	4310
Hatton Milk River Gas Pool	+321.6	16	1.53	0.75	3450
Hoosier Viking Sand Gas Pool	-18.3	26	1.52	1.43	6560
Liebenthal Milk River Gas Pool	+297.2	16	1.53	0.79	3630
Lloydminster Colony Sand Gas Pool	+134.1	23	1.54	0.70	3260
Marengo Viking Gas Pool	-10.7	21	1.48	1.47	6740
Milton Viking Sand Gas Pool	-18.3	23	1.49	1.42	6550
Pierceland Mannville Sand Gas Pool	+256.0	21	1.56	0.46	2100
Tangleflags Colony Sand Gas Pool	+159.1	20	1.61	0.69	3119
Tangleflags McLaren Sand Gas Pool	+149.3	21	1.55	0.71	3247
Tangleflags Second White Specks Gas Pool	+274.0	18	1.54	0.67	3057
Tangleflags St. Walburg Sand Gas Pool	+254.0	18	1.55	0.73	3345
Totnes Viking Gas Pool	-3.0	24	1.59	1.50	6830
Whiteside Victoria Sand Gas Pool	+481.6	20	1.53	0.43	2000
Whiteside West Viking Sand Gas Pool	-14.4	27	1.51	1.24	5940

MPR FACTORS

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA	
				(LSDS)	(ACRES) (A)
232106	Aberfeldy Sparky Sand	30	90	1	40
433007	Alameda Midale Beds Pool	35	75	2	80
435191	Alameda West Frobisher Beds Pool	35	75	2	80
433036	Alameda West Midale Beds Pool	35	72	2	80
435038	Alida East Frobisher-Alida Beds Pool	35	75	1 & 2	40 & 80
435785	Alida North Alida Beds Pool	35	75	1	40
435777	Alida West Alida Beds Pool	35	72	2	80
239022	Alsask Basal Blairmore Sand Pool	25	75	1	40
314552	Antelope Lake East Roseray Sand Pool	30	93	2	80
331064	Antelope Lake Upper Shaunavon Pool	25	93	2	80
435024	Arcola Frobisher-Alida Beds Pool	35	79	1 & 2	40 & 80
435040	Auburnton Frobisher-Alida Beds Pool	35	75	1	40
227331	Avon Hill Viking Pool	35	90	2	80
232135	Baldwinton Sparky Sand Pool	30	90	1	40
430073	Battle Creek Madison Pool	25	90	2	80
331072	Battle Creek Upper Shaunavon Pool	25	90	2	80
314553	Battrum North Roseray Sand Pool	41	97.5	1	40
314546	Battrum Roseray Sand Pool (Upper)	41	97.5	1 & 2	40 & 80
	(Main)	17	97.5	1 & 2	40 & 80
331060	Bench Upper Shaunavon Pool	25	75	4	160
433075	Benson Midale Beds Pool	50	89	2 & 4	80 & 160
238146	Beverley Cantuar Sand Pool	30	90	2	80
238148	Beverley North Cantuar Sand Pool	30	90	2	80
314641	Beverley Upper Roseray Sand Pool	35	90	1	40
433035	Bienfait Midale Beds Pool	35	85	2	80
231202	Big Gully McLaren Sand Pool	30	90	1	40
231309	Big Gully Waseca Sand Pool	30	90	1	40
331050	Bone Creek Upper Shaunavon Pool	15	94	2	80
433089	Bromhead Midale Beds Pool	35	75	4	160
435019	Browning Frobisher-Alida Beds Pool	35	75	2	80
435172	Bryant Frobisher Beds Pool	35	75	4	160
433099	Bryant Midale Beds Pool	35	89	4	160
441422	Buffalo Coulee Bakken Sand Pool	25	93	1/2	20
441428	Buffalo Coulee North Bakken Sand Pool	25	93	1	40
331059	Butte Upper Shaunavon Pool	25	95	4	160
234133	Buzzard Lloydminster Sand Pool	30	90	1	40
441426	Cactus Lake Basal Mannville - Bakken Sand Pool	25	95	1	40
435005	Cantal Frobisher-Alida Beds Pool	35	75	1 & 2	40 & 80

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (I/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
435039	Cantal South Frobisher-Alida Beds Pool	35	75	2	80
238143	Cantuar East Cantuar Sand Pool	30	90	2	80
314550	Cantuar East Roseray Sand Pool	35	90	2	80
314741	Cantuar Lower Roseray Sand Pool	35	95	1	40
238141	Cantuar Main Cantuar Sand Pool	30	90	1	40
435180	Carnduff Frobisher Beds Pool	35	75	2	80
433006	Carnduff Midale Beds Pool	35	75	2	80
232511	Celtic G.P. Sand Pool	30	90	1	40
230903	Celtic Mannville Sands Pool	30	90	1	40
232122	Celtic Sparky Sand Pool	30	90	1	40
231313	Celtic Waseca Sand Pool	30	90	1	40
435021	Clarilaw Frobisher-Alida Beds Pool	35	75	2	80
435041	Clarilaw West Frobisher-Alida Beds Pool	35	75	1	40
330062	Clintonville Shaunavon Pool	25	90	4	160
441421	Coleville Bakken Sand Pool	15	93	1/2	20
230026	Coleville Mannville Sand Pool	25	90	1	40
441429	Coleville South Bakken Sand Pool	15	93	1	40
230027	Coleville South Mannville Sand Pool	25	90	1	40
234122	Cosine Lake Lloydminster Sand Pool	30	90	1	40
441431	Court Bakken Sand Pool	25	95	1	40
331055	Covington Upper Shaunavon Pool	15	94	2	80
331071	Covington West Upper Shaunavon Pool	25	75	4	160
438030	Crystal Hill Souris Valley Beds Pool	40	90	4	160
435028	Dalesboro Frobisher-Alida Beds Pool	35	78	2	80
232125	Dee Valley East Sparky Sand Pool	30	90	1	40
231316	Dee Valley East Waseca Sand Pool	30	90	1	40
231310	Dee Valley Waseca Sand Pool	30	90	1	40
331046	Delta Upper Shaunavon Pool	25	93	2	80
227327	Dodsland Viking Sand Pool	35	90	1	40
331041	Dollard Upper Shaunavon Pool	5	91	4	160
230025	Druid Mannville Sands Pool	30	90	1	40
232109	Dulwich North Sparky Sand Pool	30	90	1/2	20
232102	Dulwich Sparky Sand Pool	30	90	1/4	10
435189	East Pinto Frobisher Beds Pool	35	75	2	80
433033	East Pinto Midale Beds Pool	35	75	2	80
331056	Eastbrook Upper Shaunavon Pool	20	91	2	80
330074	Eastend Shaunavon Pool	20	91	2 & 4	80 & 160
231320	Edam Waseca Sand Pool	30	90	1	40

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (I/Boi)	ASSIGNED AREA (A)	
				(LSDS)	(ACRES)
230904	Edam West Mannville Sands Pool	30	90	1	40
232141	Edam West Sparky/G.P. Sand Pool	30	90	1	40
231323	Edam West Waseca Sand Pool	30	90	1	40
437032	Edenvale Tilston Beds Pool	40	90	2	80
435184	Elmore Frobisher Beds Pool	45	86	2	80
433018	Elmore Midale Beds Pool	35	75	2	80
232504	Epping G.P. Sand Pool	30	90	1/2 & 1	20 & 40
232104	Epping Sparky Sand Pool	30	90	1/2 & 1	20 & 40
227323	Eureka Viking Pool	35	90	1	40
235002	Eyehill Cummings Sand Pool	30	90	1	40
437037	Fertile Tilston Beds Pool	40	90	1	40
437580	Fertile Tilston-Souris Valley Beds Pool	40	90	1	40
432085	Flat Lake Ratcliffe Beds Pool	35	80	4	160
435187	Florence Frobisher Beds Pool	35	75	2	80
230902	Forest Bank Mannville Sands Pool	30	90	1	40
232123	Forest Bank Sparky Sand Pool	30	90	1	40
231305	Forest Bank Waseca Sand Pool	30	90	1	40
314541	Fosterton Roseray Sand Pool	16	95	1	40
432090	Freda Lake Ratcliffe Beds Pool	35	90	2	80
232130	Freemont Sparky Sand Pool	30	90	1	40
231315	Freemont Waseca Sand Pool	30	90	1	40
435082	Freestone Frobisher-Alida Beds Pool	35	75	2	80
437581	Frys East Tilston-Souris Valley Beds Pool	40	90	1	40
437579	Frys Tilston-Souris Valley Beds Pool	40	90	1	40
232113	Furness Sparky Sand Pool	30	90	1/4	10
441425	Fusilier Bakken Sand Pool	25	95	1	40
435009	Gainsborough Frobisher-Alida Beds Pool	30	75	2	80
435181	Glen Ewen Frobisher Beds Pool	35	75	4	160
433008	Glen Ewen Midale Beds Pool	35	75	2 & 4	80 & 160
232112	Golden Lake North Sparky Sand Pool	30	90	1	40
231306	Golden Lake North Waseca Sand Pool	30	90	1	40
232107	Golden Lake South Sparky Sand Pool	30	90	1	40
231308	Golden Lake South Waseca Sand Pool	30	90	1	40
435168	Griffin Frobisher Beds Pool	35	89	2	80
238142	Gull Lake Basal Cantuar Sand Pool	35	92	1	40
331058	Gull Lake Central Upper Shaunavon Pool	25	97	2	80
331043	Gull Lake North Upper Shaunavon Pool	25	97	1	40
331057	Gull Lake South Upper Shaunavon Pool	25	97	4	160

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (I/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
231307	Gully Lake Waseca Sand Pool	30	90	1	40
435761	Handsworth Alida Beds Pool	35	75	2	80
435087	Hartaven Frobisher-Alida Beds Pool	40	89	2	80
435190	Hastings East Frobisher Beds Pool	35	75	2	80
435177	Hastings Frobisher Beds Pool	35	75	2	80
437027	Hazelwood Tilston Beds Pool	40	90	2	80
314548	Hazlet Roseray Sand Pool	21	94.7	2	80
441430	Hearts Hill Bakken Sand Pool	25	95	1	40
432094	Hoffer Ratcliffe Lower Beds Pool	35	80	4	160
431993	Hoffer Ratcliffe Upper Beds Pool	35	80	4	160
441424	Hoosier Bakken Sand Pool	25	95	1	40
435167	Hume Frobisher Beds Pool	35	89	4	160
433091	Hume Midale Beds Pool	35	89	2 & 4	80 & 160
521029	Hummingbird Birdbear Pool	25	83	2	80
432088	Hummingbird Ratcliffe Beds Pool	25	75	2	80
435163	Huntoon Frobisher Beds Pool	50	89	2 & 4	80 & 160
		35	89	2 & 4	80 & 160
433079	Huntoon Midale Beds Pool	50	89	2 & 4	80 & 160
331054	Illerbrun Upper Shaunavon Pool	15	94	4	160
435003	Ingoldsby Frobisher-Alida Beds Pool	35	89	2	80
435165	Innes Frobisher Beds Pool	35	89	2	80
331049	Instow Upper Shaunavon Pool	5	94	2	80
238150	Java Cantuar Sand Pool	30	90	2	80
331042	Johnston Upper Shaunavon Pool	25	97	1	40
437016	Kenosee Tilston Beds Pool	40	90	2	80
227342	Kerrobert Viking Sand Pool	35	90	1	40
521034	Kisbey Birdbear Pool	40	75	2	80
432086	Lake Alma Ratcliffe Beds Pool	35	80	2	80
231201	Landrose McLaren Sand Pool	30	90	1/2 & 1	20 & 40
231301	Landrose Waseca Sand Pool	30	90	1/2 & 1	20 & 40
232129	Lashburn South Sparky Sand Pool	30	90	1	40
231314	Lashburn South Waseca Sand Pool	30	90	1	40
231303	Lashburn Waseca Sand Pool	30	90	1	40
232137	Lashburn West Sparky Sand Pool	30	90	1	40
330047	Leitchville Shaunavon Pool	35	90	2 & 4	80 & 160
330048	Leon Lake Shaunavon Pool	25	90	4	160
437023	Lightning Tilston Beds Pool	40	90	2	80
232124	Lloydminster Sparky Sand Pool	30	90	1/2	20

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (I/Boi)	ASSIGNED AREA (A)	
				(LSDS)	(ACRES)
232103	Lone Rock Sparky Sand Pool	30	90	1/4	10
435073	Lost Horse Hill Frobisher-Alida Beds Pool	45	89	1 & 2	40 & 80
433081	Lougheed Midale Beds Pool	35	89	2	80
240024	Loverna Detrital Pool	25	75	1	40
231302	Low Lake Waseca Sand Pool	30	90	1/2	20
227335	Lucky Hills Viking Pool	35	90	2 & 4	80 & 160
441432	Luseland Bakken Sand Pool	25	95	1	40
232126	Macklin Sparky Sand Pool	30	90	1	40
433095	Macoun Midale Beds Pool	35	89	4	160
433069	Macoun West Midale Beds Pool	40	89	4	160
231205	Maidstone McLaren Sand Pool	30	90	1	40
231322	Maidstone Waseca Sand Pool	30	90	1	40
314543	Main Success Roseray Sand Pool	30	93	1	40
232143	Manito Lake Sparky Sand Pool	30	90	1	40
232138	Marsden South Sparky Sand Pool	30	90	1	40
232105	Marsden Sparky Sand Pool	30	90	1/4	10
435080	Melrose Frobisher-Alida Beds Pool	45	89	2	80
435161	Midale Central Frobisher Beds Pool	50	89	2	80
433072	Midale Central Midale Beds Pool	50	89	2	80
433070	Minard Midale Beds Pool	35	89	4	160
437014	Moose Mountain Tilston Beds Pool	40	90	1	40
437076	Moose Valley Tilston Beds Pool	40	90	2	80
435031	Morrisview Frobisher-Alida Beds Pool	35	80	2	80
231203	Neilburg McLaren Sand Pool	30	90	1	40
432092	Neptune Ratcliffe Beds Pool	35	80	4	160
433026	North Antler Midale Beds Pool	35	75	2	80
435762	North Handsworth Alida Beds Pool	35	75	2	80
441423	North Hoosier Bakken Sand Pool	25	95	1	40
239021	North Hoosier Basal Blairmore Sand Pool	25	90	1/2	20
314542	North Premier Roseray Sand Pool	25	93	1	40
331044	North Premier Upper Shaunavon Pool	25	93	1	40
441433	North Smiley Bakken Sand Pool	25	93	1	40
435185	Northgate Frobisher Beds Pool	35	75	4	160
433020	Northgate Midale Beds Pool	35	75	2	80
232509	Northminster North G.P. Sand Pool	30	90	1	40
232134	Northminster North Sparky Sand Pool	30	90	1	40
232108	Northminster Sparky Sand Pool	30	90	1	40
435780	Nottingham Alida Beds Pool	35	75	2	80
		22	75	2	80

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (I/Boi)	ASSIGNED AREA (A) (LSDS)	(ACRES)
435178	Oakley Frobisher Beds Pool	35	75	2	80
432083	Oungre Ratcliffe Beds Pool	35	80	2	80
438022	Parkman Souris Valley Beds Pool	50	90	2	80
437578	Parkman South Tilston-Souris Valley Beds Pool	40	90	2	80
437013	Parkman Tilston Beds Pool	40	90	1	40
437576	Parkman Tilston-Souris Valley Beds Pool	40	90	1 & 2	40 & 80
		50	90	1 & 2	40 & 80
331061	Pennant Upper Shaunavon Pool	25	95	2	80
232507	Pikes Peak G.P. Sand Pool	30	90	1	40
232128	Pikes Peak Sparky Sand Pool	30	90	1	40
231312	Pikes Peak Waseca Sand Pool	30	90	1	40
435182	Pinto Frobisher Beds Pool	35	75	2	80
433015	Pinto Midale Beds Pool	35	75	2	80
227340	Plato North Viking Pool	35	90	1	40
227333	Plato Viking Pool	35	90	2	80
441427	Plover Lake Bakken Sand Pool	25	95	1	40
435010	Queensdale East Frobisher-Alida Beds Pool	35	85	1 & 2	40 & 80
435782	Queensdale North Alida Beds Pool	35	75	2	80
435781	Queensdale West Alida Beds Pool	35	75	2	80
433097	Ralph Midale Beds Pool	35	89	2	80
331045	Rapdan Upper Shaunavon Pool	20	91	4	160
330063	Rapdan West Shaunavon Pool	20	91	4	160
354902	Red Jacket Gravelbourg Pool	38	98	2	80
336501	Red Jacket Shaunavon-Gravelbourg Pool	38	98	1	40
441476	Rocanville Bakken Sand Pool	35	75	2	80
441477	Roncott Bakken Sand Pool	25	94	2	80
435779	Rosebank Alida Beds Pool	35	79	2	80
435778	Rosebank South Alida Beds Pool	35	79	2	80
230905	Rush Lake Mannville Sands Pool	30	90	1	40
232140	Rush Lake Sparky Sand Pool	30	90	1	40
231321	Rush Lake Waseca Sand Pool	30	90	1	40
234142	Salt Lake Lloydminster Sand Pool	30	90	1	40
234139	Senlac Lloydminster Sand Pool	30	90	1	40
435164	Sherwood Frobisher Beds Pool	35	86	1 & 2	40 & 80
232101	Silverdale Sparky Sand Pool	30	90	1/4	10
435179	Silverton Frobisher Beds Pool	35	75	2	80
432096	Skinner Lake Ratcliffe Beds Pool	35	80	4	160
227023	Smiley-Dewar Viking Pool	35	90	1	40

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (I/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
435165	Souris Flat Frobisher Beds Pool	35	75	2	80
437002	South Fletwode Tilston Beds Pool	40	90	1	40
314545	South Success Roseray Sand Pool	30	93	1	40
231311	Standard Hill Waseca Sand Pool	30	90	1	40
435001	Star Valley Frobisher-Alida Beds Pool	35	81	1 & 2	40 & 80
435176	Steelman Frobisher Beds Pool	35	75	2	80
433004	Steelman Midale Beds Pool	35	72	2	80
436276	Storthoaks Alida-Tilston Beds Pool	35	79	2	80
		40	90	2	80
435078	Stoughton Frobisher-Alida Beds Pool	35	86	2	80
435171	Stoughton South Frobisher Beds Pool	35	86	2	80
314551	Success North Roseray Sand Pool	30	93	1	40
314544	Success Roseray Sand Alpha Pool	30	93	1	40
314549	Suffield Roseray Sand Pool	35	95	1 & 2	40 & 80
337052	Suffield Upper Shaunavon Pool	25	97	2	80
231204	Tangleflags East McLaren Sand Pool	30	90	1	40
232505	Tangleflags G.P. Sand Pool	30	90	1	40
234121	Tangleflags Lloydminster Sand Pool	30	90	1	40
230901	Tangleflags Mannville Sands Pool	30	90	1	40
231207	Tangleflags McLaren Sand Pool	30	90	1	40
235004	Tangleflags North Cummings Sand Pool	30	90	1	40
232506	Tangleflags North G.P. Sand Pool	30	90	1	40
234127	Tangleflags North Lloydminster Sand Pool	30	90	1	40
232114	Tangleflags Sparky Sand Pool	30	90	1	40
232508	Tangleflags West G.P. Sand Pool	30	90	1	40
234132	Tangleflags West Lloydminster Sand Pool	30	90	1	40
232131	Tangleflags West Sparky Sand Pool	30	90	1	40
433098	Tatagwa Midale Beds Pool	35	92	2	80
314547	Verlo Roseray Sand Pool	21	90	2	80
435170	Viewfield Frobisher Beds Pool	35	86	1	40
433071	Viewhill Midale Beds Pool	50	89	4	160
238661	Wapella Sand Pool	25	99	1	40
435784	Warmley Alida Beds Pool	35	90	2	80
436277	Wauchope Alida Tilston Beds Pool	35	75	1	40
435169	Weir Hill Frobisher Beds Pool	35	75	2	80
435166	West Innes Frobisher Beds Pool	35	89	2	80
433077	West Kingsford Midale Beds Pool	35	83.6	2	80
232510	Westhazel G.P. Sand Pool	30	90	1	40

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (I/Boi)	ASSIGNED AREA	
				(LSDS) (A)	(ACRES)
232136	Westhazel Sparky Sand Pool	30	90	1	40
435162	Weyburn Frobisher Beds Pool	35	89	2	80
433074	Weyburn Midale Beds Pool	35	89	2	80
		50	89	2	80
435160	Weyburn North Frobisher Beds Pool	50	89	2	80
433068	Weyburn North Midale Beds Pool	50	89	2	80
437012	White Bear Tilston Beds Pool	40	90	1	40
437577	White Bear Tilston-Souris Valley Beds Pool	40	90	2	80
		50	90	2	80
331051	Whitemud Upper Shaunavon Pool	20	91	4	160
227326	Whiteside Viking Sand Pool	40	91	1	40
435783	Wildwood Alida Beds Pool	35	75	2	80
435011	Willmar Frobisher-Alida Beds Pool	25	78	1 & 2	40 & 80
435188	Winmore Frobisher Beds Pool	45	85	2	80
235007	Winter Cummings Sand Pool	30	90	1	40
435183	Workman Frobisher Beds Pool	35	84	2	80
433017	Workman Midale Beds Pool	35	79	2	80

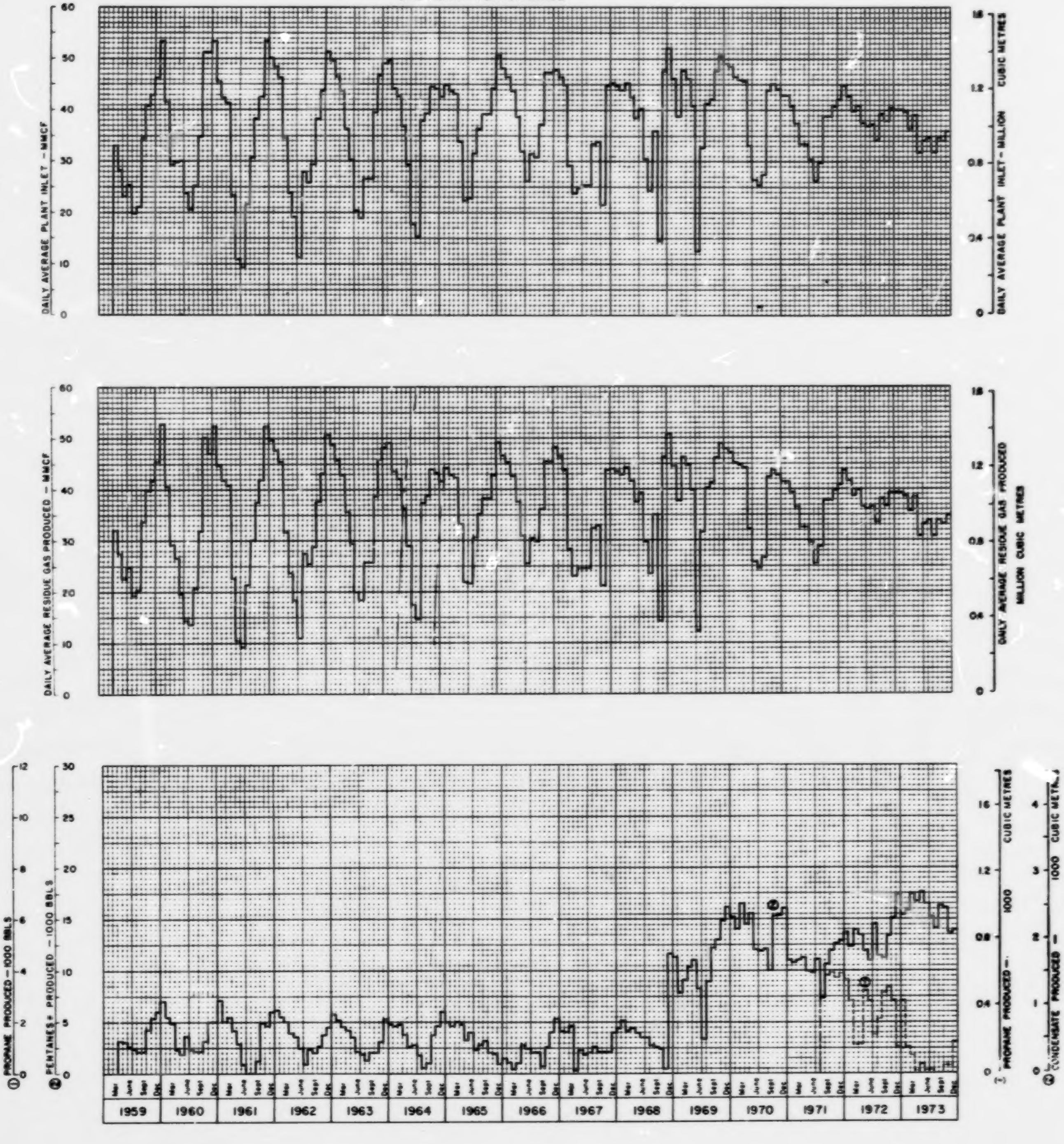
* Factors in effect on June 1, 1986

GAS PLANT

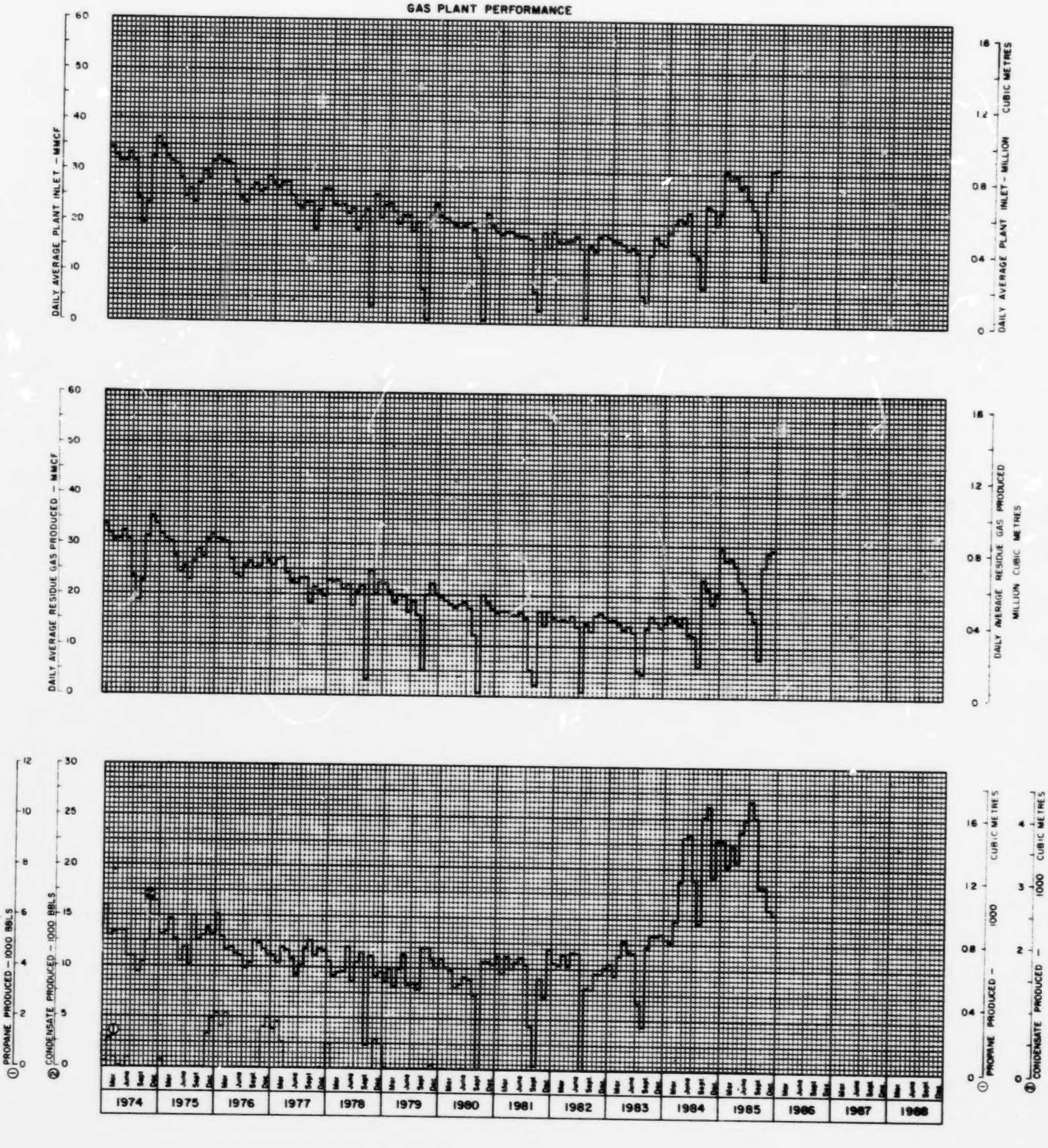
PERFORMANCE GRAPHS

COLEVILLE GAS PLANT

GAS PLANT PERFORMANCE

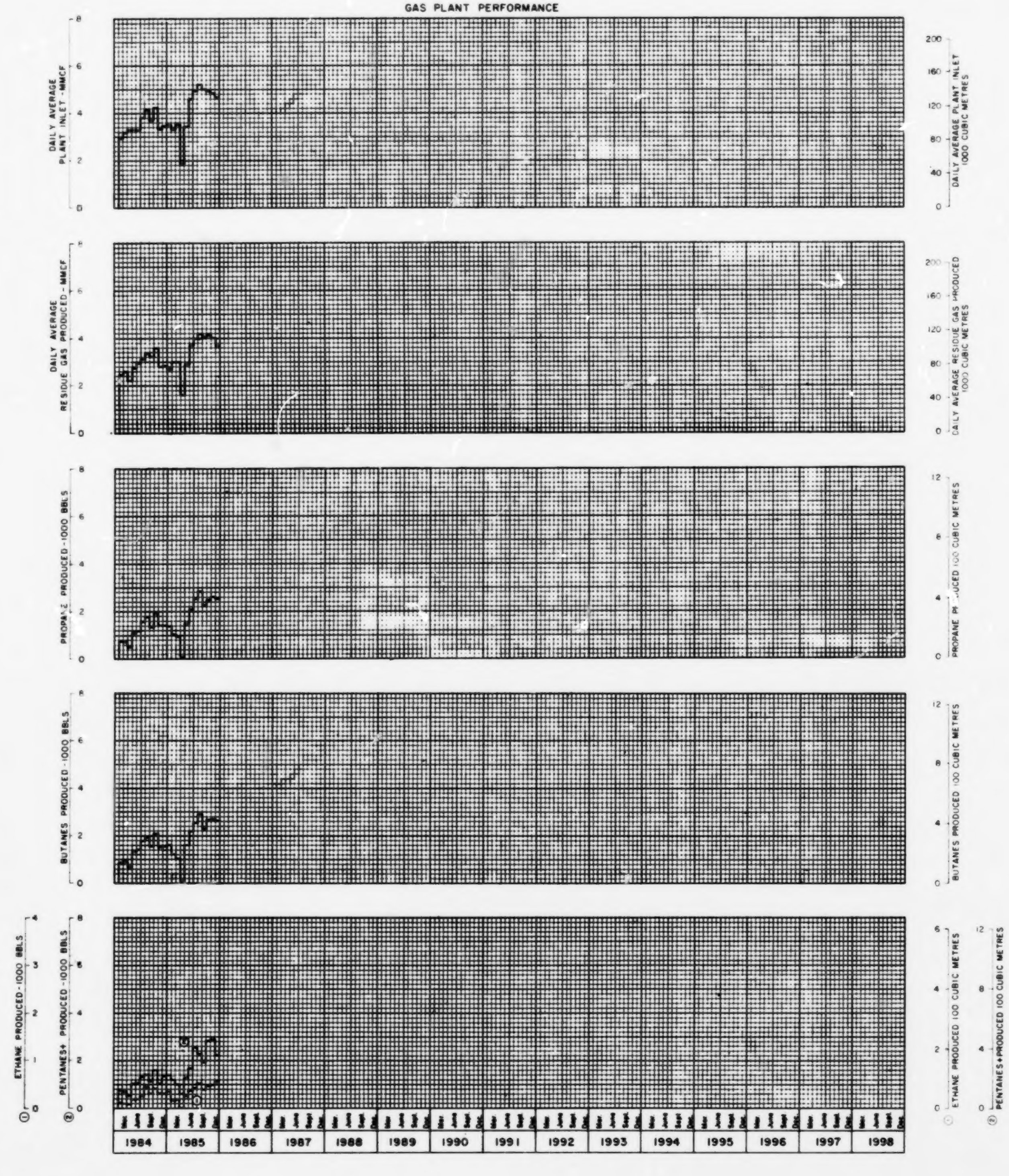


COLEVILLE GAS PLANT

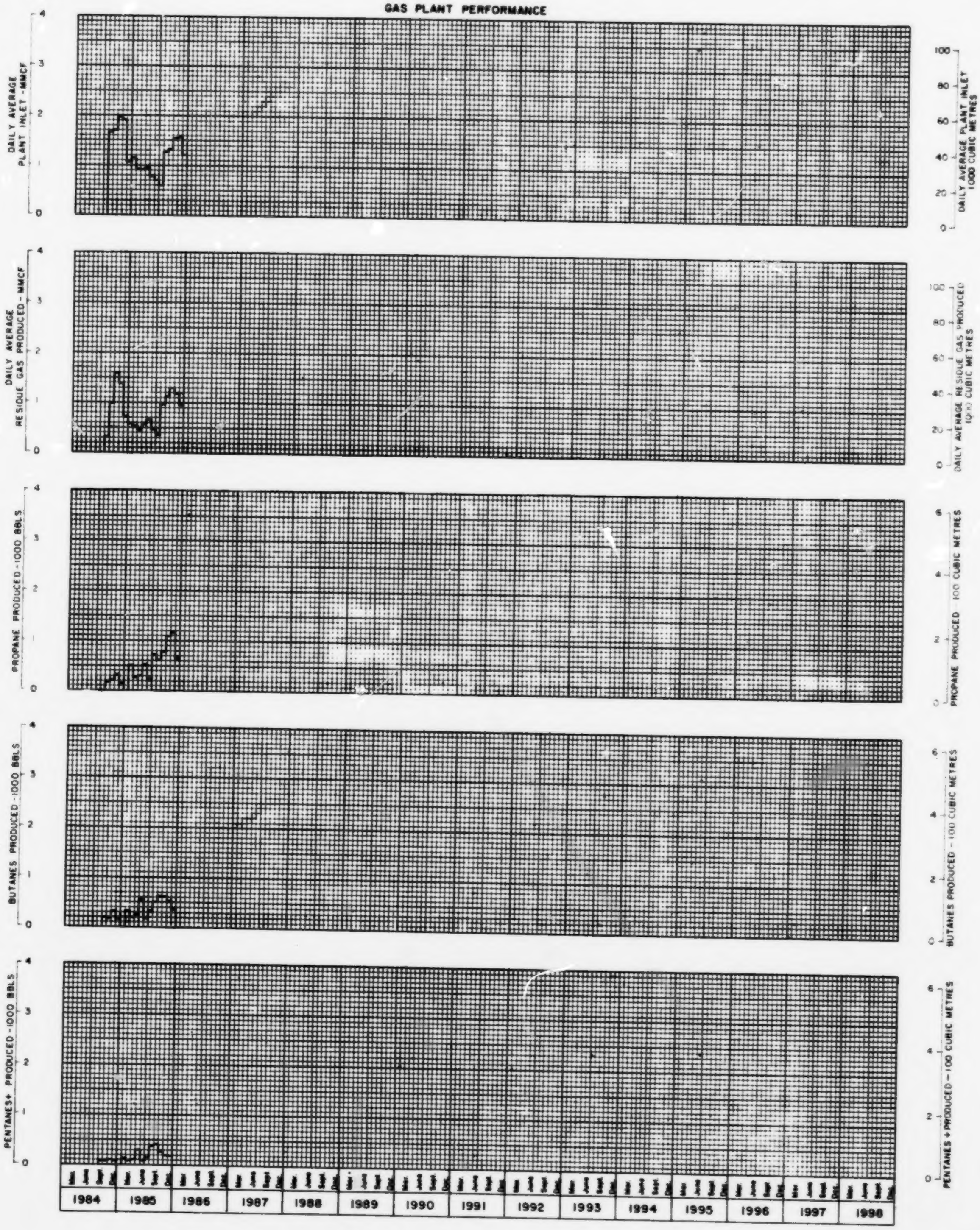


DODSLAND GAS PLANT

GAS PLANT PERFORMANCE



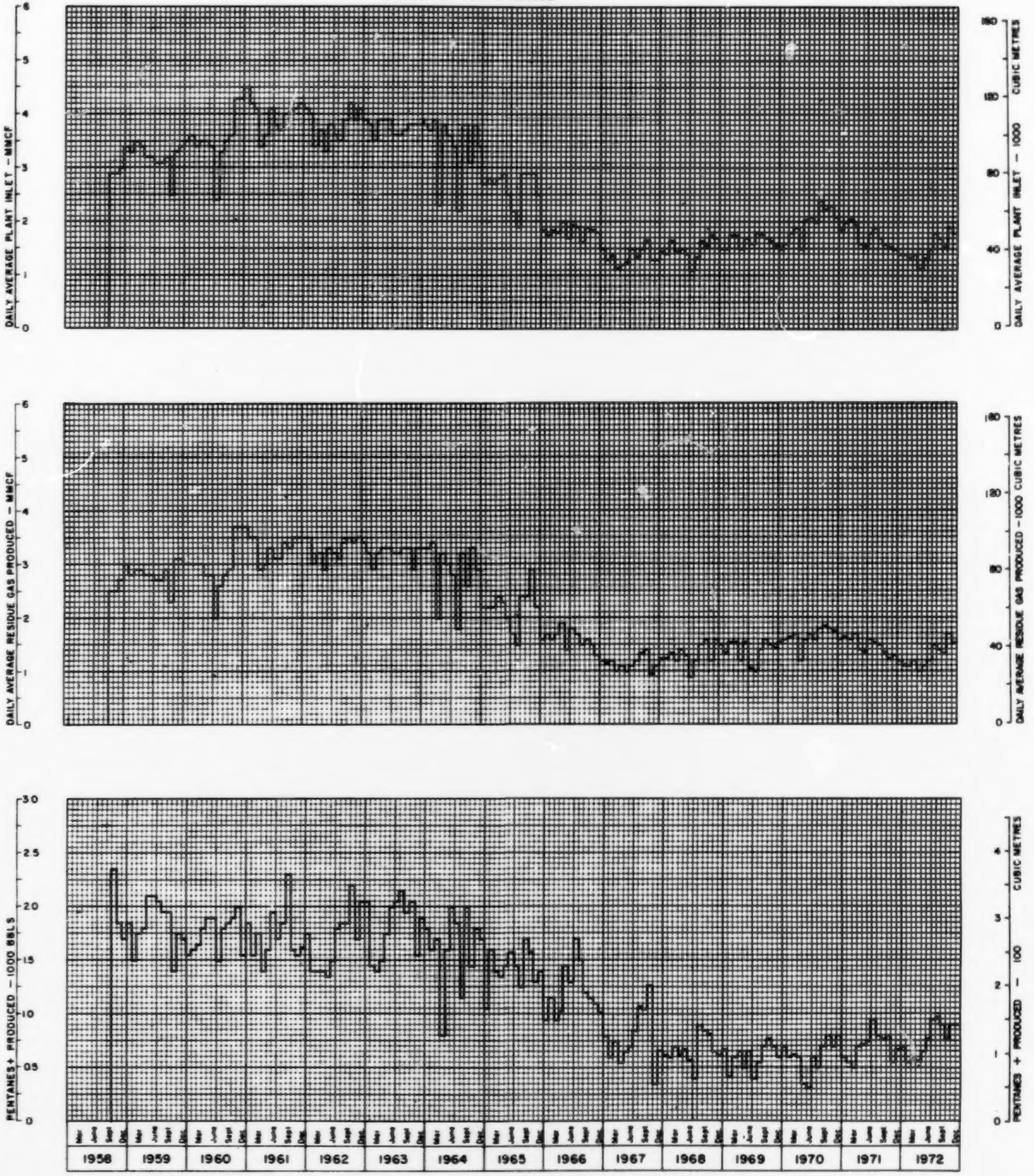
STEELMAN NORTH GAS PLANT



SMILEY GAS CONSERVATION PLANT

SMILEY-DEWAR VIKING SAND

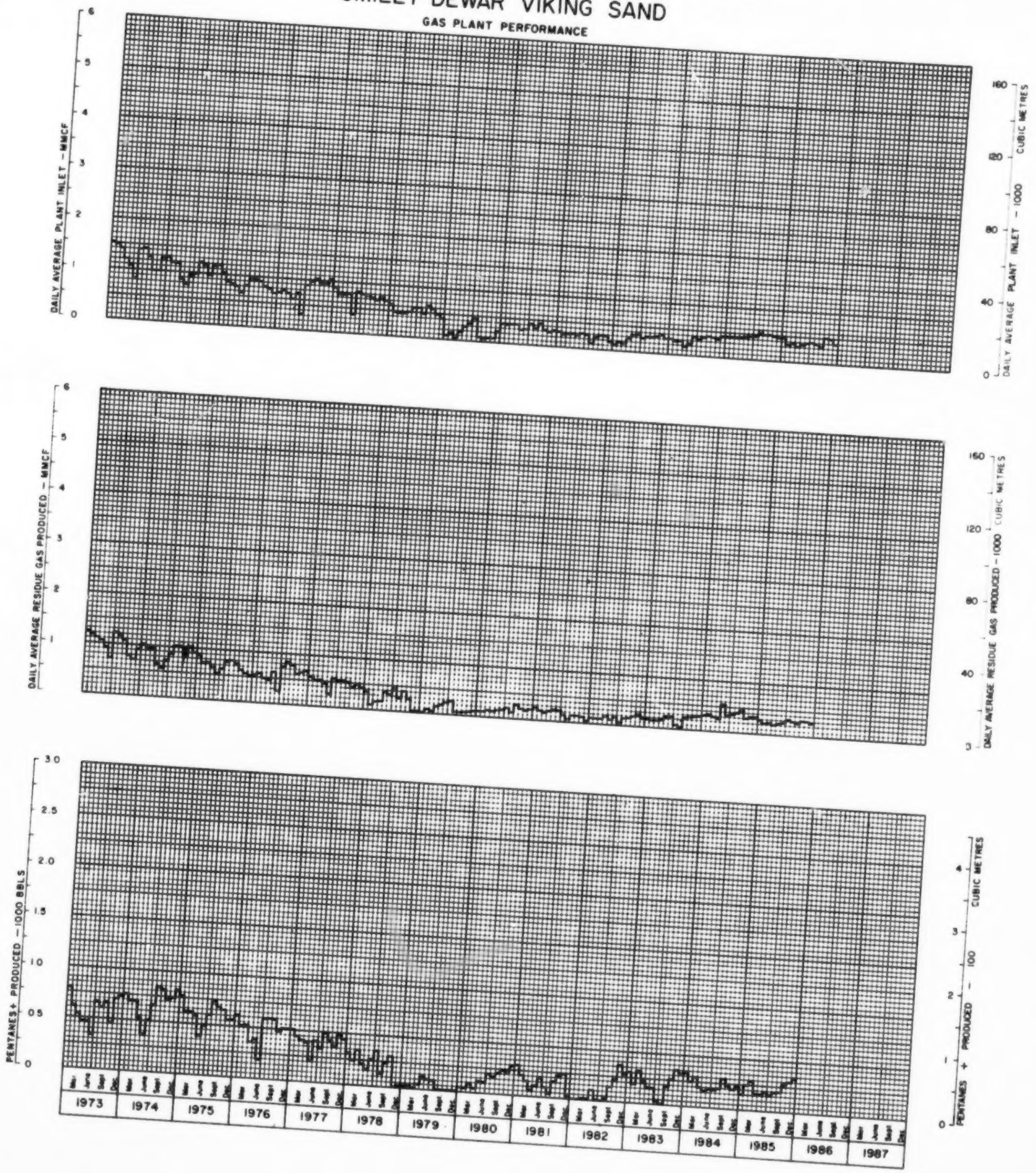
GAS PLANT PERFORMANCE



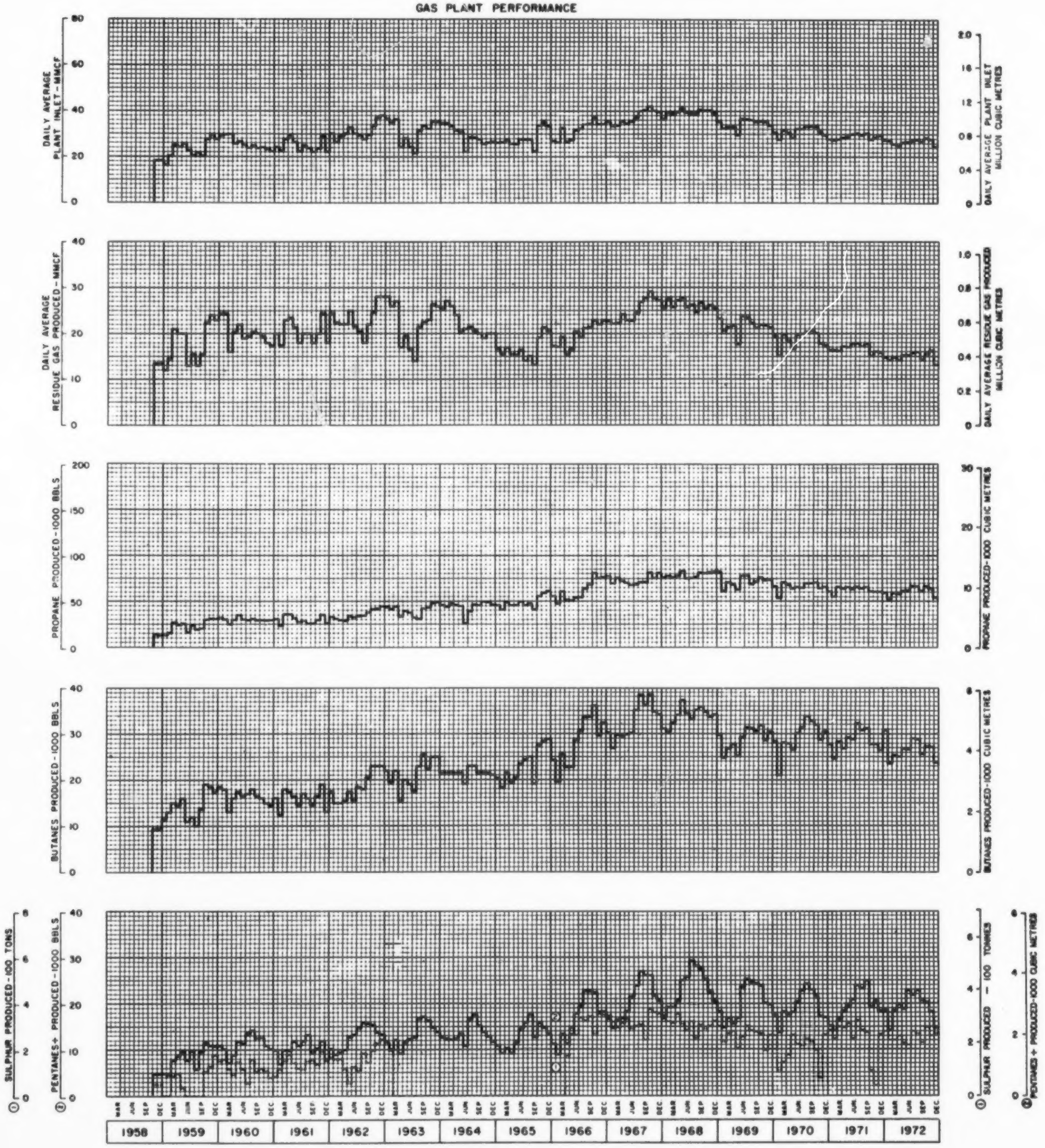
SMILEY GAS CONSERVATION PLANT

SMILEY-DEWAR VIKING SAND

GAS PLANT PERFORMANCE

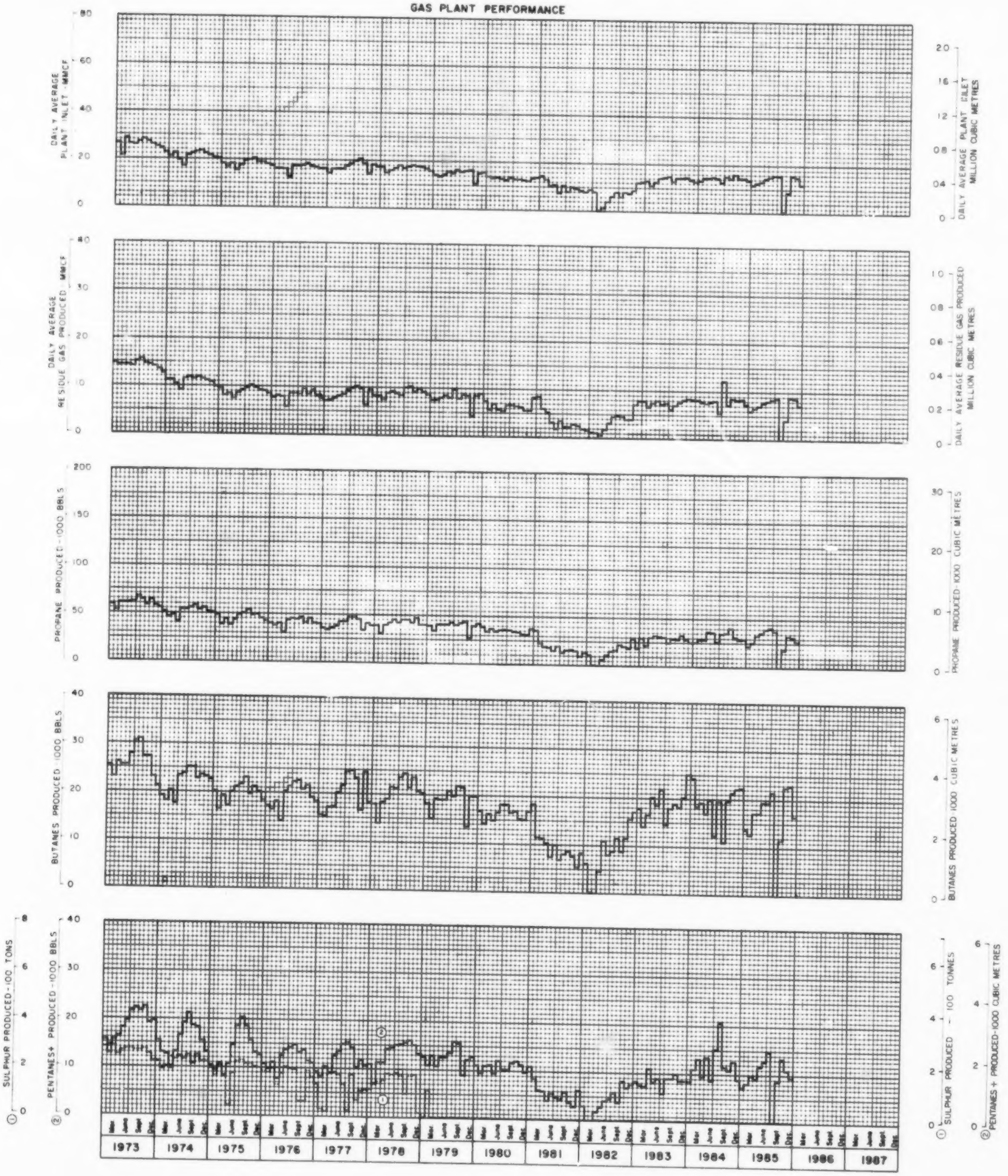


STEELMAN GAS PLANT



GAS PLANT PERFORMANCE

STEELMAN GAS PLANT



FORMATION WATER RESISTIVITY

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
1	30	W1	FROBISHER	1	0.059	0.059
2	30	W1	MANNVILLE	1	1.000	1.000
			FROBISHER	1	0.057	0.057
			FROBISHER-ALIDA	11	0.047 - 0.060	0.054
3	30	W1	FROBISHER-ALIDA	3	0.044 - 0.064	0.054
			ALIDA	8	0.044 - 0.066	0.057
			TILSTON	1	0.063	0.063
			SOURIS VALLEY	2	0.055 - 0.066	0.061
			BIRDBEAR	1	0.057	0.057
4	30	W1	TILSTON	1	0.078	0.078
5	30	W1	TILSTON	1	0.170	0.170
6	30	W1	TILSTON	2	0.115 - 0.120	0.118
			SOURIS VALLEY	2	0.160	0.160
7	30	W1	SOURIS VALLEY	1	0.210	0.210
9	30	W1	SOURIS VALLEY	2	0.160 - 0.182	0.171
10	30	W1	MANNVILLE	1	0.302	0.302
			SOURIS VALLEY	1	0.228	0.228
16	30	W1	BAKKEN	1	0.184	0.184
17	30	W1	INTERLAKE	2	0.033 - 0.035	0.034
			STONY MOUNTAIN-RED RIVER	1	0.045	0.045
			WINNIPEG	4	0.037 - 0.070	0.047
20	30	W1	BAKKEN	1	0.680	0.680
26	30	W1	DUPEROW	1	0.300	0.300
1	31	W1	MANNVILLE	4	0.957 - 1.070	1.019
			MIDALE	6	0.063 - 0.078	0.074
			FROBISHER	9	0.041 - 0.056	0.048
2	31	W1	FROBISHER	5	0.050 - 0.075	0.064
			FROBISHER-ALIDA	2	0.052 - 0.066	0.059
			ALIDA	1	0.060	0.060
3	31	W1	FROBISHER	4	0.043 - 0.059	0.051
			FROBISHER-ALIDA	8	0.049 - 0.076	0.061
4	31	W1	FROBISHER-ALIDA	14	0.042 - 0.069	0.050
			ALIDA	18	0.053 - 0.078	0.066
			TILSTON	3	0.046 - 0.070	0.060
5	31	W1	FROBISHER-ALIDA	2	0.060 - 0.066	0.063
			ALIDA-TILSTON	2	0.048 - 0.059	0.054
			TILSTON	3	0.055 - 0.070	0.064
6	31	W1	TILSTON	2	0.095 - 0.097	0.096
7	31	W1	SOURIS VALLEY	3	0.110 - 0.120	0.113
9	31	W1	SOURIS VALLEY	1	0.152	0.152
12	31	W1	VIKING	1	0.400	0.400
			GRAVELBOURG	1	0.800	0.800
			SOURIS VALLEY	1	0.300	0.300
			BIRDBEAR	1	0.090	0.090
14	31	W1	SOURIS VALLEY	1	0.228	0.228
15	31	W1	MANNVILLE	2	0.600 - 0.620	0.610
			GRAVELBOURG	1	0.340	0.340
			SOURIS VALLEY	1	0.058	0.058
16	31	W1	BAKKEN	7	0.200 - 0.235	0.220
17	31	W1	BAKKEN	1	0.182	0.182
24	31	W1	SOURIS VALLEY	1	0.104	0.104
25	31	W1	WINNIPEG	1	0.047	0.047
1	32	W1	MIDALE	5	0.068 - 0.076	0.072
			FROBISHER	10	0.044 - 0.060	0.051
2	32	W1	MANNVILLE	3	0.950 - 0.970	0.958
			MIDALE	1	0.070	0.070
			FROBISHER	2	0.040 - 0.049	0.045
			FROBISHER-ALIDA	1	0.040	0.040
3	32	W1	FROBISHER	2	0.044 - 0.047	0.046
			BIRDBEAR	1	0.070	0.070
			DUPEROW	2	0.061 - 0.064	0.063
			SOURIS RIVER	1	0.058	0.058
			SILURIAN	2	0.066	0.066
			WINNIPEG	1	0.060	0.060
4	32	W1	MANNVILLE	2	0.870 - 0.890	0.880
			JURASSIC	1	0.320	0.320
			GRAVELBOURG	1	0.200	0.200
			FROBISHER	1	0.047	0.047
			FROBISHER-ALIDA	2	0.047 - 0.048	0.048
			ALIDA	9	0.047 - 0.070	0.058
			SOURIS VALLEY	1	0.055	0.055
5	32	W1	FROBISHER-ALIDA	5	0.057 - 0.070	0.064
			ALIDA	12	0.047 - 0.067	0.058
			TILSTON	2	0.056 - 0.057	0.057
6	32	W1	TILSTON	5	0.052 - 0.077	0.060
			BIRDBEAR	1	0.060	0.060
			SOURIS RIVER	1	0.060	0.060
			WINNIPEGOSIS	1	0.060	0.060
			INTERLAKE	2	0.060	0.060
7	32	W1	TILSTON	7	0.047 - 0.092	0.075
			TILSTON-SOURIS VALLEY	1	0.076	0.076
8	32	W1	TILSTON	1	0.094	0.094
			SOURIS VALLEY	2	0.100 - 0.102	0.101
			INTERLAKE	2	0.046 - 0.047	0.047
9	32	W1	SOURIS VALLEY	3	0.131 - 0.180	0.160
16	32	W1	BAKKEN	1	0.260	0.260
17	32	W1	BAKKEN	3	0.187 - 0.310	0.246
			WINNIPEGOSIS	1	0.053	0.053
			INTERLAKE	1	0.052	0.052
			WINNIPEG	1	0.052	0.052
29	32	W1	SOURIS RIVER	1	0.150	0.150
			SOURIS RIVER-DAWSON BAY	1	0.093	0.093
			DAWSON BAY	2	0.078 - 0.094	0.086
1	33	W1	MIDALE	2	0.077 - 0.078	0.078
			FROBISHER	6	0.043 - 0.059	0.050
2	33	W1	MANNVILLE	1	0.843	0.843
			MIDALE	22	0.051 - 0.094	0.078
			FROBISHER-ALIDA	4	0.047 - 0.060	0.054
3	33	W1	RAVENSCRAG	1	2.400	2.400
			FROBISHER	3	0.049 - 0.061	0.054
			FROBISHER-ALIDA	4	0.044 - 0.058	0.052
4	33	W1	FROBISHER	8	0.047 - 0.052	0.049
			FROBISHER-ALIDA	13	0.049 - 0.080	0.063
5	33	W1	MANNVILLE	2	0.780 - 0.920	0.850
			RIERDON	2	0.270 - 0.370	0.320
			GRAVELBOURG	1	0.320	0.320
			KISBEY	1	0.070	0.070

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
5	33	W1	FROBISHER-ALIDA	7	0.047 - 0.070	0.059
			ALIDA	11	0.046 - 0.068	0.054
			ALIDA-TILSTON	1	0.055	0.055
			BIRDBEAR	1	0.050	0.050
6	33	W1	FROBISHER-ALIDA	6	0.055 - 0.075	0.063
			ALIDA	11	0.047 - 0.060	0.054
			TILSTON	2	0.053 - 0.057	0.055
7	33	W1	TILSTON	2	0.051 - 0.062	0.057
8	33	W1	TILSTON	4	0.086 - 0.124	0.110
			TILSTON-SOURIS VALLEY	4	0.084 - 0.108	0.094
			SOURIS VALLEY	2	0.105 - 0.158	0.132
			WINNIPEGOSIS	1	0.056	0.056
9	33	W1	TILSTON	9	0.093 - 0.131	0.114
			TILSTON-SOURIS VALLEY	5	0.125 - 0.148	0.136
			SOURIS VALLEY	13	0.105 - 0.148	0.131
14	33	W1	MANNVILLE	1	0.302	0.302
			JURASSIC	1	0.316	0.316
20	33	W1	MANNVILLE	2	0.240 - 0.265	0.253
			SOURIS RIVER	1	0.049	0.049
26	33	W1	WINNIPEG	1	0.048	0.048
1	34	W1	MIDALE	4	0.069 - 0.070	0.070
			FROBISHER	2	0.045	0.045
2	34	W1	MIDALE	34	0.045 - 0.092	0.069
			FROBISHER	11	0.042 - 0.057	0.048
			FROBISHER-ALIDA	8	0.044 - 0.054	0.049
3	34	W1	FROBISHER	7	0.039 - 0.060	0.050
			FROBISHER-ALIDA	4	0.040 - 0.045	0.044
4	34	W1	MANNVILLE	2	0.690 - 0.750	0.720
			FROBISHER	5	0.046 - 0.052	0.048
			FROBISHER-ALIDA	11	0.040 - 0.050	0.046
5	34	W1	FROBISHER	9	0.046 - 0.064	0.053
			FROBISHER-ALIDA	10	0.045 - 0.070	0.054
6	34	W1	FROBISHER-ALIDA	8	0.048 - 0.060	0.052
			ALIDA	1	0.056	0.056
9	34	W1	TILSTON	2	0.092 - 0.159	0.126
			TILSTON-SOURIS VALLEY	1	0.098	0.098
			SOURIS VALLEY	1	0.086	0.086
11	34	W1	MADISON (UNDIFF)	1	0.240	0.240
			BIRDBEAR	1	0.071	0.071
2	1	W2	RATCLIFFE	1	0.060	0.060
			MIDALE	6	0.051 - 0.075	0.066
			FROBISHER	2	0.058 - 0.059	0.059
			FROBISHER-ALIDA	2	0.040 - 0.049	0.045
3	1	W2	MANNVILLE	1	0.704	0.704
			MIDALE	23	0.046 - 0.077	0.064
			FROBISHER	12	0.040 - 0.054	0.046
			FROBISHER-ALIDA	9	0.044 - 0.052	0.049
4	1	W2	FROBISHER	21	0.040 - 0.055	0.049
			FROBISHER-ALIDA	12	0.041 - 0.051	0.045
5	1	W2	MANNVILLE	2	0.790 - 0.840	0.815
			RIERDON	3	0.300 - 0.350	0.333
			FROBISHER	1	0.048	0.048
			FROBISHER-ALIDA	4	0.046 - 0.060	0.053
			ALIDA	1	0.049	0.049
			BIRDBEAR	1	0.048	0.048
6	1	W2	FROBISHER-ALIDA	22	0.045 - 0.058	0.050
			ALIDA	1	0.048	0.048
7	1	W2	ALIDA	1	0.052	0.052
			TILSTON	3	0.055 - 0.060	0.058
9	1	W2	TILSTON	11	0.072 - 0.094	0.082
			SOURIS VALLEY	1	0.102	0.102
10	1	W2	TILSTON	3	0.081 - 0.086	0.083
			SOURIS VALLEY	5	0.082 - 0.140	0.096
11	1	W2	SOURIS VALLEY	2	0.190 - 0.220	0.205
14	1	W2	MANNVILLE	2	0.390 - 0.630	0.510
			JURASSIC	12	0.220 - 0.560	0.380
15	1	W2	GRAVELBOURG	1	0.310	0.310
16	1	W2	MANNVILLE	1	0.490	0.490
			JURASSIC	1	0.290	0.290
1	2	W2	RATCLIFFE	1	0.047	0.047
			MIDALE	1	0.044	0.044
			FROBISHER	4	0.034 - 0.052	0.044
			FROBISHER-ALIDA	2	0.045	0.045
			BIRDBEAR	1	0.052	0.052
2	2	W2	RATCLIFFE	2	0.051 - 0.060	0.056
			FROBISHER	1	0.054	0.054
			INTERLAKE	1	0.048	0.048
			RED RIVER	1	0.047	0.047
			DEADWOOD	1	0.046	0.046
3	2	W2	MANNVILLE	7	0.414 - 0.700	0.567
			MIDALE	30	0.045 - 0.070	0.057
			FROBISHER	10	0.044 - 0.060	0.051
4	2	W2	FROBISHER	8	0.052 - 0.062	0.055
5	2	W2	FROBISHER	6	0.051 - 0.062	0.058
			FROBISHER-ALIDA	2	0.047 - 0.051	0.049
6	2	W2	FROBISHER	3	0.046 - 0.053	0.048
			FROBISHER-ALIDA	5	0.047 - 0.061	0.054
			KISBEY	1	0.042	0.042
			ALIDA	2	0.046 - 0.056	0.051
7	2	W2	ALIDA	2	0.053 - 0.054	0.054
			ALIDA-TILSTON	1	0.050	0.050
8	2	W2	TILSTON	1	0.053	0.053
9	2	W2	TILSTON	1	0.067	0.067
			SOURIS VALLEY	1	0.068	0.068
10	2	W2	TILSTON	7	0.083 - 0.116	0.092
			SOURIS VALLEY	3	0.083 - 0.164	0.113
			BIRDBEAR	1	0.053	0.053
11	2	W2	SOURIS VALLEY	1	0.205	0.205
			BIRDBEAR	1	0.077	0.077
12	2	W2	WINNIPEGOSIS	1	0.047	0.047
18	2	W2	JURASSIC	1	0.205	0.205
21	2	W2	RED RIVER	1	0.037	0.037
			WINNIPEG	1	0.039	0.039
1	3	W2	MIDALE	5	0.044 - 0.047	0.045
			FROBISHER	1	0.044	0.044
			FROBISHER-ALIDA	1	0.052	0.052
2	3	W2	MANNVILLE	2	0.700 - 0.840	0.770
			RATCLIFFE	1	0.070	0.070

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA TWP	AREA RGE	AREA MER	FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
2	3	W2	MIDALE	1	0.049	0.049
			FROBISHER	5	0.035 - 0.047	0.042
3	3	W2	MANNVILLE	1	0.398	0.398
			MIDALE	9	0.053 - 0.067	0.061
			FROBISHER	4	0.046 - 0.062	0.055
			FROBISHER-ALIDA	1	0.058	0.058
4	3	W2	MIDALE	1	0.046	0.046
			FROBISHER	3	0.044 - 0.060	0.053
			FROBISHER-ALIDA	1	0.055	0.055
5	3	W2	FROBISHER	6	0.050 - 0.060	0.057
			FROBISHER-ALIDA	5	0.040 - 0.060	0.048
			TILSTON	1	0.060	0.060
			BIRDBEAR	1	0.060	0.060
			STONY MOUNTAIN	1	0.060	0.060
6	3	W2	MANNVILLE	2	0.354 - 0.550	0.452
			FROBISHER	2	0.052 - 0.066	0.059
			FROBISHER-ALIDA	5	0.049 - 0.060	0.055
			ALIDA	1	0.060	0.060
8	3	W2	LOWER WATROUS	1	0.048	0.048
			ALIDA	3	0.051 - 0.064	0.058
			ALIDA-TILSTON	1	0.062	0.062
9	3	W2	TILSTON	4	0.057 - 0.092	0.066
10	3	W2	TILSTON	3	0.070 - 0.116	0.090
11	3	W2	SOURIS VALLEY	1	0.160	0.160
17	3	W2	MANNVILLE	1	0.297	0.297
18	3	W2	JURASSIC	3	0.214 - 0.332	0.282
19	3	W2	SOURIS VALLEY	1	0.136	0.136
			DUPEROW	1	0.085	0.085
22	3	W2	JURASSIC	1	0.240	0.240
			SOURIS VALLEY	1	0.150	0.150
			DUPEROW	1	0.068	0.068
			SOURIS RIVER	1	0.055	0.055
			DAWSON BAY	1	0.060	0.060
25	3	W2	BIRDBEAR	1	0.188	0.188
1	4	W2	MANNVILLE	1	0.294	0.294
			MIDALE	3	0.042 - 0.045	0.043
			FROBISHER	5	0.040 - 0.070	0.051
			FROBISHER-ALIDA	1	0.052	0.052
2	4	W2	MANNVILLE	2	0.390 - 0.570	0.480
			GRAVELBOURG	1	0.188	0.188
			POPLAR	1	0.070	0.070
			MIDALE	4	0.040 - 0.048	0.045
			FROBISHER	8	0.042 - 0.052	0.045
			FROBISHER-ALIDA	1	0.049	0.049
			BIRDBEAR	1	0.046	0.046
			DUPEROW	1	0.074	0.074
			WINNIPEGOSIS	1	0.046	0.046
			INTERLAKE	1	0.046	0.046
			STONY MOUNTAIN	1	0.048	0.048
			WINNIPEG	1	0.048	0.048
3	4	W2	VIKING	1	0.450	0.450
			MANNVILLE	6	0.325 - 0.920	0.497
			JURASSIC	2	0.410 - 0.440	0.425
			MIDALE	45	0.041 - 0.082	0.050
			FROBISHER	5	0.048 - 0.050	0.049
			FROBISHER-ALIDA	3	0.044 - 0.060	0.053
			BIRDBEAR	1	0.061	0.061
			DUPEROW	2	0.049	0.049
			INTERLAKE	1	0.044	0.044
			RED RIVER	1	0.049	0.049
			DEADWOOD	2	0.046	0.046
4	4	W2	MANNVILLE	2	0.321 - 0.380	0.351
			MIDALE	12	0.050 - 0.063	0.054
			FROBISHER	8	0.047 - 0.055	0.050
			FROBISHER-ALIDA	2	0.044 - 0.070	0.057
			BIRDBEAR	1	0.045	0.045
5	4	W2	MIDALE	12	0.046 - 0.086	0.062
			FROBISHER	2	0.056 - 0.063	0.060
			FROBISHER-ALIDA	1	0.046	0.046
6	4	W2	FROBISHER	3	0.052 - 0.058	0.055
			FROBISHER-ALIDA	3	0.053 - 0.061	0.057
7	4	W2	FROBISHER	2	0.052	0.052
			FROBISHER-ALIDA	4	0.044 - 0.073	0.054
			KISBEY	1	0.050	0.050
			ALIDA	1	0.052	0.052
8	4	W2	FROBISHER-ALIDA	1	0.052	0.052
			BIRDBEAR	1	0.056	0.056
9	4	W2	ALIDA	2	0.053 - 0.062	0.058
10	4	W2	ALIDA-TILSTON	1	0.063	0.063
			TILSTON	2	0.073 - 0.075	0.074
11	4	W2	TILSTON	8	0.093 - 0.148	0.125
12	4	W2	TILSTON	1	0.169	0.169
16	4	W2	JURASSIC	1	0.126	0.126
19	4	W2	SOURIS VALLEY	1	0.093	0.093
1	5	W2	MIDALE	5	0.043 - 0.054	0.048
			FROBISHER	1	0.041	0.041
			FROBISHER-ALIDA	3	0.047 - 0.056	0.051
2	5	W2	MIDALE	4	0.045 - 0.053	0.049
			FROBISHER	2	0.041 - 0.046	0.044
3	5	W2	MANNVILLE	2	0.345 - 0.358	0.352
			MIDALE	28	0.045 - 0.054	0.049
			FROBISHER	9	0.043 - 0.068	0.053
4	5	W2	MANNVILLE	9	0.323 - 0.519	0.390
			JURASSIC	1	0.390	0.390
			RATCLIFFE	1	0.078	0.078
			MIDALE	57	0.046 - 0.069	0.058
			FROBISHER	16	0.044 - 0.065	0.054
			FROBISHER-ALIDA	3	0.048 - 0.052	0.050
			ALIDA	1	0.055	0.055
			BIRDBEAR	1	0.045	0.045
			SOURIS RIVER	1	0.043	0.04[illegible]
			WINNIPEGOSIS	1	0.044	0.044
5	5	W2	MIDALE	22	0.058 - 0.097	0.072
			FROBISHER	8	0.046 - 0.064	0.055
6	5	W2	FROBISHER	11	0.054 - 0.077	0.060
			FROBISHER-ALIDA	2	0.048 - 0.055	0.052
7	5	W2	FROBISHER	2	0.055 - 0.062	0.059
			FROBISHER-ALIDA	2	0.053 - 0.056	0.055
			ALIDA	3	0.071 - 0.088	0.078
			TILSTON	1	0.068	0.068
8	5	W2	MANNVILLE	1	0.260	0.260
9	5	W2	ALIDA	2	0.057 - 0.075	0.066
10	5	W2	FROBISHER	1	0.066	0.066
			ALIDA	1	0.066	0.066
			BIRDBEAR	1	0.054	0.054
11	5	W2	TILSTON	4	0.120 - 0.207	0.142

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
12	5	W2	SOURIS VALLEY	1	0.158	0.158
24	5	W2	SOURIS VALLEY	1	0.139	0.139
26	5	W2	TORQUAY	1	0.150	0.150
27	5	W2	VIKING	1	0.910	0.910
1	6	W2	FROBISHER	1	0.047	0.047
2	6	W2	FROBISHER-ALIDA	1	0.080	0.080
			DUPEROW	2	0.054 - 0.136	0.095
3	6	W2	POPLAR	1	0.060	0.060
			MIDALE	1	0.060	0.060
			FROBISHER	1	0.060	0.060
4	6	W2	MANNVILLE	3	0.251 - 0.266	0.256
			MIDALE	28	0.047 - 0.094	0.070
			FROBISHER	52	0.031 - 0.087	0.048
5	6	W2	VIKING	1	0.375	0.375
			MANNVILLE	4	0.120 - 0.620	0.375
			JURASSIC	2	0.275 - 0.320	0.298
			RATCLIFFE	1	0.091	0.091
			MIDALE	16	0.054 - 0.094	0.074
			FROBISHER	6	0.048 - 0.070	0.060
			TILSTON	1	0.062	0.062
6	6	W2	MIDALE	1	0.062	0.062
			BIRDBEAR	2	0.054 - 0.056	0.055
			WINNIPEGOSIS	1	0.053	0.053
7	6	W2	FROBISHER	3	0.055 - 0.069	0.062
			ALIDA	1	0.057	0.057
			BIRDBEAR	3	0.047 - 0.058	0.051
9	6	W2	FROBISHER-ALIDA	6	0.046 - 0.060	0.055
			ALIDA	1	0.081	0.081
			BIRDBEAR	1	0.060	0.060
10	6	W2	TILSTON	1	0.172	0.172
11	6	W2	TILSTON	1	0.173	0.173
12	6	W2	TILSTON	4	0.110 - 0.194	0.141
16	6	W2	MANNVILLE	2	0.197 - 0.300	0.249
19	6	W2	JURASSIC	1	0.180	0.180
22	6	W2	MANNVILLE	1	0.121	0.121
23	6	W2	MANNVILLE	1	0.117	0.117
28	6	W2	DUPEROW	1	0.150	0.150
1	7	W2	POPLAR	1	0.050	0.050
			MIDALE	1	0.050	0.050
3	7	W2	VIKING	1	0.272	0.272
			POPLAR	1	0.057	0.057
			MIDALE	1	0.050	0.050
			FROBISHER-ALIDA	1	0.056	0.056
			BIRDBEAR	1	0.046	0.046
4	7	W2	MIDALE	13	0.043 - 0.068	0.054
			FROBISHER	6	0.049 - 0.057	0.051
5	7	W2	FROBISHER	2	0.061	0.061
6	7	W2	FROBISHER	9	0.055 - 0.075	0.065
7	7	W2	FROBISHER	2	0.054 - 0.056	0.055
			FROBISHER-ALIDA	1	0.059	0.059
8	7	W2	FROBISHER	1	0.065	0.065
9	7	W2	MANNVILLE	1	0.153	0.153
			FROBISHER-ALIDA	6	0.046 - 0.056	0.053
			ALIDA	4	0.087 - 0.116	0.098
10	7	W2	FROBISHER-ALIDA	5	0.100 - 0.120	0.108
			ALIDA	5	0.078 - 0.096	0.086
			TILSTON	5	0.095 - 0.153	0.112
			BIRDBEAR	1	0.078	0.078
11	7	W2	ALIDA	1	0.090	0.090
			TILSTON	3	0.112 - 0.128	0.118
13	7	W2	TILSTON	1	0.194	0.194
16	7	W2	JURASSIC	2	0.175 - 0.183	0.179
			SOURIS VALLEY	1	0.478	0.478
19	7	W2	VIKING	1	0.570	0.570
21	7	W2	JURASSIC	1	0.102	0.102
27	7	W2	DAWSON BAY	1	0.061	0.061
29	7	W2	VIKING	1	0.320	0.320
			INTERLAKE	1	0.056	0.056
1	8	W2	FROBISHER	1	0.052	0.052
2	8	W2	MIDALE	1	0.062	0.062
3	8	W2	POPLAR	1	0.060	0.060
			MIDALE	1	0.060	0.060
			DUPEROW	2	0.060	0.060
4	8	W2	MIDALE	4	0.051 - 0.082	0.064
			FROBISHER	3	0.061 - 0.085	0.072
5	8	W2	FROBISHER	2	0.055 - 0.073	0.064
6	8	W2	MANNVILLE	1	0.320	0.320
			MIDALE	7	0.100 - 0.180	0.126
			FROBISHER	2	0.081 - 0.094	0.088
			FROBISHER-ALIDA	1	0.065	0.065
7	8	W2	FROBISHER	4	0.057 - 0.069	0.064
			FROBISHER-ALIDA	2	0.059 - 0.063	0.061
			BIRDBEAR	2	0.046 - 0.050	0.048
8	8	W2	FROBISHER	4	0.058 - 0.065	0.061
			FROBISHER-ALIDA	5	0.055 - 0.063	0.060
			ALIDA	1	0.072	0.072
			DUPEROW	1	0.049	0.049
			INTERLAKE	1	0.060	0.060
9	8	W2	FROBISHER-ALIDA	3	0.112 - 0.120	0.117
			ALIDA	1	0.145	0.145
10	8	W2	FROBISHER-ALIDA	8	0.103 - 0.151	0.116
			ALIDA	8	0.081 - 0.165	0.116
12	8	W2	TILSTON	1	0.215	0.215
			BIRDBEAR	1	0.140	0.140
			DUPEROW	1	0.157	0.157
			RED RIVER	1	0.043	0.043
14	8	W2	SOURIS VALLEY	1	0.230	0.230
			BIRDBEAR	1	0.120	0.120
			DUPEROW	1	0.070	0.070
16	8	W2	SOURIS VALLEY	1	0.350	0.350
2	9	W2	MIDALE-FROBISHER	1	0.050	0.050
			FROBISHER	1	0.049	0.049
4	9	W2	MIDALE	3	0.041 - 0.055	0.046

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
4	9	W2	FROBISHER-ALIDA	1	0.055	0.055
5	9	W2	FROBISHER	1	0.070	0.070
6	9	W2	MANNVILLE	1	0.356	0.356
			MIDALE	24	0.063 - 0.185	0.109
			FROBISHER	4	0.058 - 0.064	0.061
			FROBISHER-ALIDA	2	0.062 - 0.070	0.066
7	9	W2	MANNVILLE	1	0.347	0.347
			MIDALE	2	0.064 - 0.069	0.067
			FROBISHER-ALIDA	1	0.055	0.055
9	9	W2	SOURIS VALLEY	1	0.195	0.195
10	9	W2	FROBISHER-ALIDA	2	0.172 - 0.200	0.186
			DUPEROW	1	0.059	0.059
			WINNIPEGOSIS	1	0.050	0.050
			INTERLAKE	1	0.051	0.051
			RED RIVER	1	0.048	0.048
20	9	W2	VIKING	1	0.088	0.088
			JURASSIC	1	0.077	0.077
21	9	W2	JURASSIC	1	0.096	0.096
22	9	W2	JURASSIC	1	0.118	0.118
26	9	W2	VIKING	1	0.670	0.670
			SOURIS VALLEY	1	0.110	0.110
			BIRDBEAR	1	0.093	0.093
33	9	W2	DUPEROW	2	0.080 - 0.081	0.081
46	9	W2	DAWSON BAY	1	1.600	1.600
			DEADWOOD	1	0.080	0.080
2	10	W2	MIDALE-FROBISHER	1	0.050	0.050
			FROBISHER	1	0.049	0.049
4	10	W2	FROBISHER	1	0.065	0.065
5	10	W2	MANNVILLE	1	0.410	0.410
			FROBISHER	1	0.070	0.070
6	10	W2	MANNVILLE	3	0.417 - 0.490	0.441
			MIDALE	92	0.058 - 0.093	0.074
			FROBISHER	10	0.056 - 0.087	0.072
			FROBISHER-ALIDA	1	0.064	0.064
			BIRDBEAR	1	0.051	0.051
			DUPEROW	1	0.049	0.049
			WINNIPEGOSIS	1	0.048	0.048
7	10	W2	MIDALE	8	0.064 - 0.118	0.097
			FROBISHER	17	0.057 - 0.079	0.067
			FROBISHER-ALIDA	1	0.058	0.058
8	10	W2	FROBISHER	4	0.070 - 0.181	0.122
			BIRDBEAR	1	0.056	0.056
9	10	W2	FROBISHER	1	0.412	0.412
10	10	W2	FROBISHER-ALIDA	1	0.157	0.157
			ALIDA	1	0.174	0.174
11	10	W2	ALIDA	1	0.214	0.214
14	10	W2	TILSTON	1	0.190	0.190
20	10	W2	JURASSIC	1	0.104	0.104
24	10	W2	MANNVILLE	2	0.100 - 0.120	0.110
			BIRDBEAR	1	0.084	0.084
			SOURIS RIVER	1	0.049	0.049
34	10	W2	MANNVILLE	1	0.182	0.182
			DUPEROW	2	0.158 - 0.168	0.163
34	10	W2	WINNIPEG	1	0.066	0.066
2	11	W2	MIDALE	1	0.060	0.060
3	11	W2	MIDALE	3	0.050 - 0.054	0.051
			MIDALE-FROBISHER	1	0.068	0.068
			FROBISHER	1	0.065	0.065
4	11	W2	MIDALE	1	0.080	0.080
			FROBISHER	1	0.050	0.050
			INTERLAKE	1	0.042	0.042
			ORDOVICIAN	1	0.043	0.043
5	11	W2	MIDALE	3	0.058 - 0.074	0.069
			FROBISHER	1	0.064	0.064
6	11	W2	MANNVILLE	2	0.370 - 0.427	0.399
			MIDALE	78	0.051 - 0.094	0.070
			FROBISHER	18	0.030 - 0.078	0.057
7	11	W2	FROBISHER	13	0.065 - 0.161	0.100
			BAKKEN	3	0.044 - 0.057	0.050
8	11	W2	FROBISHER	12	0.088 - 0.300	0.187
			FROBISHER-ALIDA	2	0.148 - 0.150	0.149
9	11	W2	BIRDBEAR	1	0.112	0.112
10	11	W2	ALIDA	3	0.227 - 0.257	0.240
13	11	W2	BAKKEN	1	0.250	0.250
23	11	W2	JURASSIC	1	0.080	0.080
3	12	W2	MIDALE	2	0.058 - 0.069	0.064
			FROBISHER	1	0.059	0.059
4	12	W2	VIKING	1	0.820	0.820
			FROBISHER	1	0.062	0.062
5	12	W2	MIDALE	11	0.056 - 0.078	0.068
			FROBISHER	2	0.063 - 0.073	0.068
			FROBISHER-ALIDA	1	0.062	0.062
6	12	W2	MIDALE	28	0.060 - 0.100	0.074
			FROBISHER	1	0.054	0.054
7	12	W2	MIDALE	4	0.061 - 0.086	0.076
			FROBISHER	8	0.172 - 0.335	0.223
8	12	W2	FROBISHER	4	0.208 - 0.244	0.224
9	12	W2	FROBISHER	1	0.230	0.230
10	12	W2	FROBISHER	2	0.210 - 0.365	0.288
			ALIDA	1	0.233	0.233
11	12	W2	MANNVILLE	1	0.770	0.770
			ALIDA	1	0.340	0.340
13	12	W2	TILSTON	2	0.270 - 0.312	0.291
14	12	W2	BIRDBEAR	1	0.205	0.205
20	12	W2	JURASSIC	1	0.082	0.082
21	12	W2	MANNVILLE	1	0.084	0.084
24	12	W2	BIRDBEAR	1	0.130	0.130
30	12	W2	DAWSON BAY	1	0.049	0.049
32	12	W2	DAWSON BAY	1	0.082	0.082
			WINNIPEGOSIS	1	0.055	0.055
			INTERLAKE	1	0.063	0.063
1	13	W2	RATCLIFFE	1	0.067	0.067

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
2	13	W2	ALIDA	1	0.064	0.064
			DUPEROW	1	0.043	0.043
3	13	W2	MIDALE	5	0.054 - 0.068	0.059
			FROBISHER	2	0.060 - 0.066	0.063
			RED RIVER	1	0.044	0.044
5	13	W2	MIDALE	9	0.062 - 0.078	0.067
			MIDALE-FROBISHER	1	0.142	0.142
6	13	W2	MANNVILLE	7	0.360 - 0.514	0.422
			MIDALE	32	0.057 - 0.159	0.095
			MIDALE-FROBISHER	7	0.070 - 0.144	0.107
			FROBISHER	7	0.063 - 0.251	0.140
			FROBISHER-ALIDA	2	0.066 - 0.250	0.158
7	13	W2	VIKING	1	0.850	0.850
			MANNVILLE	1	0.880	0.880
			GRAVELBOURG	1	0.280	0.280
			MIDALE	13	0.095 - 0.180	0.131
			FROBISHER	2	0.200 - 0.210	0.205
			FROBISHER-ALIDA	3	0.230 - 0.390	0.290
9	13	W2	FROBISHER-ALIDA	1	0.218	0.218
			BIRDBEAR	1	0.116	0.116
10	13	W2	FROBISHER-ALIDA	1	0.205	0.205
13	13	W2	TILSTON	1	0.230	0.230
28	13	W2	BIRDBEAR	1	0.220	0.220
45	13	W2	DEADWOOD	1	0.066	0.066
52	13	W2	WINNIPEG	1	2.560	2.560
2	14	W2	VIKING	1	0.740	0.740
			MANNVILLE	1	0.850	0.850
			RATCLIFFE	1	0.062 - 0.067	0.064
			RATCLIFFE-MIDALE	1	0.068	0.068
3	14	W2	VIKING	1	1.120	1.120
			RATCLIFFE-MIDALE	1	0.089	0.089
			FROBISHER-ALIDA	1	0.058	0.058
4	14	W2	BAKKEN	1	0.050	0.050
			WINNIPEGOSIS	1	0.053	0.053
5	14	W2	MIDALE	8	0.060 - 0.073	0.066
			FROBISHER	3	0.060 - 0.092	0.071
6	14	W2	MIDALE	39	0.064 - 0.272	0.143
			MIDALE-FROBISHER	3	0.157 - 0.220	0.183
			FROBISHER	3	0.220 - 0.286	0.249
			FROBISHER-ALIDA	2	0.273 - 0.300	0.287
7	14	W2	MIDALE	5	0.145 - 0.210	0.168
			WINNIPEGOSIS	1	0.047	0.047
9	14	W2	VIKING	1	0.810	0.810
10	14	W2	BIRDBEAR	1	0.105	0.105
			INTERLAKE	1	0.045	0.045
			WINNIPEG	1	0.042	0.042
11	14	W2	VIKING	1	0.830	0.830
			JURASSIC	1	0.600	0.600
			FROBISHER-ALIDA	1	0.260	0.260
			ALIDA	1	0.284	0.284
			BAKKEN	1	0.180	0.180
15	14	W2	BIRDBEAR	1	0.243	0.243
52	14	W2	WINNIPEG	1	1.340	1.340
			DEADWOOD	1	1.500	1.500
1	15	W2	VIKING	1	0.890	0.890
			MANNVILLE	1	0.840	0.840
			POPLAR-RATCLIFFE	1	0.056	0.056
			RATCLIFFE	12	0.047 - 0.071	0.058
			MIDALE	2	0.057 - 0.075	0.066
			TILSTON	1	0.098	0.098
2	15	W2	RATCLIFFE	1	0.067	0.067
			MIDALE	1	0.060	0.060
3	15	W2	MIDALE	1	0.062	0.062
			FROBISHER-ALIDA	1	0.091	0.091
5	15	W2	MIDALE	3	0.265 - 0.270	0.267
			FROBISHER	1	0.277	0.277
6	15	W2	VIKING	1	1.100	1.100
			MIDALE	1	0.248	0.248
7	15	W2	MIDALE	4	0.212 - 0.290	0.256
			FROBISHER-ALIDA	1	0.380	0.380
			BIRDBEAR	1	0.087	0.087
			WINNIPEGOSIS	1	0.048	0.048
22	15	W2	RED RIVER	1	0.077	0.077
25	15	W2	BIRDBEAR	1	0.086	0.086
1	16	W2	VIKING	2	0.850 - 0.980	0.915
			MANNVILLE	2	0.700 - 0.740	0.720
			RATCLIFFE	6	0.046 - 0.072	0.056
			FROBISHER-ALIDA	1	0.049	0.049
2	16	W2	RATCLIFFE	1	0.066	0.066
3	16	W2	RATCLIFFE	1	0.048	0.048
			MIDALE-FROBISHER	1	0.053	0.053
4	16	W2	POPLAR	1	0.600	0.600
			MIDALE	1	0.110	0.110
6	16	W2	MIDALE	2	0.266 - 0.290	0.278
			BIRDBEAR	1	0.049	0.049
7	16	W2	VIKING	1	0.780	0.780
			MIDALE	1	0.300	0.300
			FROBISHER	1	0.340	0.340
8	16	W2	MIDALE	4	0.135 - 0.305	0.244
			DUPEROW	1	0.053	0.053
9	16	W2	FROBISHER	1	0.230	0.230
			FROBISHER-ALIDA	1	0.240	0.240
			BIRDBEAR	1	0.064	0.064
14	16	W2	RED RIVER	1	0.056	0.056
19	16	W2	BIRDBEAR	1	0.110	0.110
21	16	W2	DUPEROW	1	0.060	0.060
			SOURIS RIVER	1	0.055	0.055
			WINNIPEGOSIS	1	0.069	0.069
			INTERLAKE	1	0.074	0.074
			RED RIVER	1	0.074	0.074
			WINNIPEG	1	0.079	0.079
23	16	W2	RED RIVER	1	0.067	0.067
			WINNIPEG	1	0.078	0.078
25	16	W2	BIRDBEAR	1	0.110	0.110
31	16	W2	THREE FORKS	1	0.127	0.127
1	17	W2	VIKING	1	0.680	0.680
			MANNVILLE	1	0.845	0.845
			POPLAR	1	0.046	0.046
			RATCLIFFE	3	0.035 - 0.065	0.053

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
1	17	W2	RED RIVER	1	0.051	0.051
2	17	W2	MANNVILLE	1	1.000	1.000
			RATCLIFFE	1	0.052	0.052
			MIDALE	1	0.093	0.093
			BIRDBEAR	1	0.072	0.072
3	17	W2	RATCLIFFE	1	0.085	0.085
4	17	W2	RATCLIFFE	2	0.063 - 0.086	0.075
			BIRDBEAR	1	0.051	0.051
			WINNIPEG	1	0.044	0.044
5	17	W2	VIKING	1	0.790	0.790
			LOWER SHAUNAVON	2	0.360	0.360
			MIDALE	2	0.410	0.410
			FROBISHER-ALIDA	2	0.180 - 0.380	0.280
			BIRDBEAR	1	0.080	0.080
13	17	W2	RIERDON	1	0.330	0.330
			MADISON (UNDIFF)	1	0.305	0.305
27	17	W2	DAWSON BAY	1	0.046	0.046
			WINNIPEGOSIS	1	0.048	0.048
35	17	W2	INTERLAKE	1	0.043	0.043
48	17	W2	DAWSON BAY	1	0.790	0.790
			WINNIPEGOSIS	1	1.470	1.470
			INTERLAKE	1	2.170	2.170
			DEADWOOD	1	2.430	2.430
1	18	W2	BIRDBEAR	1	0.057	0.057
2	18	W2	RED RIVER	1	0.050	0.050
4	18	W2	RATCLIFFE	1	0.116	0.116
5	18	W2	MIDALE	1	0.398	0.398
			BIRDBEAR	1	0.110	0.110
6	18	W2	RIERDON	1	0.104	0.104
			MIDALE	1	0.330	0.330
			BIRDBEAR	1	0.115	0.115
			RED RIVER	1	0.047	0.047
7	18	W2	MIDALE	1	0.460	0.460
			TILSTON	1	0.222	0.222
			BIRDBEAR	1	0.106	0.106
			DUPEROW	1	0.061	0.061
12	18	W2	VIKING	1	1.200	1.200
			GRAVELBOURG	1	0.900	0.900
			FROBISHER-ALIDA	1	0.500	0.500
16	18	W2	MANNVILLE	1	0.453	0.453
28	18	W2	DAWSON BAY	1	0.056	0.056
46	18	W2	STONY MOUNTAIN	1	0.141	0.141
			WINNIPEG	1	0.104	0.104
50	18	W2	DAWSON BAY	2	3.200	3.200
			WINNIPEG	1	3.300	3.300
1	19	W2	BIRDBEAR	1	0.049	0.049
2	19	W2	MANNVILLE	1	1.130	1.130
			POPLAR	3	0.050 - 0.086	0.071
			RATCLIFFE	3	0.069 - 0.100	0.082
			BIRDBEAR	4	0.037 - 0.068	0.051
			INTERLAKE	1	0.061	0.061
			STONY MOUNTAIN	1	0.130	0.130
			RED RIVER	2	0.052 - 0.060	0.056
			WINNIPEG	1	0.060	0.060
3	19	W2	RATCLIFFE	2	0.082 - 0.091	0.087
3	19	W2	BIRDBEAR	1	0.047	0.047
4	19	W2	BIRDBEAR	1	0.227	0.227
			RED RIVER	1	0.048	0.048
5	19	W2	RATCLIFFE	1	0.155	0.155
			RATCLIFFE-MIDALE	2	0.310 - 0.320	0.315
6	19	W2	RATCLIFFE-MIDALE	1	0.390	0.390
			MIDALE	6	0.265 - 0.383	0.330
			BAKKEN	1	0.067	0.067
			BIRDBEAR	1	0.072	0.072
8	19	W2	BIRDBEAR	1	0.059	0.059
10	19	W2	VIKING	1	1.050	1.050
			GRAVELBOURG	1	0.690	0.690
			RATCLIFFE	1	0.420	0.420
13	19	W2	WATROUS	1	0.340	0.340
			FROBISHER-ALIDA	1	0.380	0.380
			BIRDBEAR	1	0.120	0.120
42	19	W2	SOURIS RIVER	1	0.100	0.100
47	19	W2	WINNIPEGOSIS	1	1.180	1.180
1	20	W2	POPLAR	1	0.068	0.068
			RATCLIFFE	1	0.090	0.090
			BIRDBEAR	2	0.070 - 0.080	0.075
			INTERLAKE	1	0.055	0.055
			WINNIPEG	1	0.053	0.053
2	20	W2	RATCLIFFE	1	0.210	0.210
			FROBISHER-ALIDA	1	0.140	0.140
3	20	W2	MADISON (UNDIFF)	1	0.973	0.973
4	20	W2	MADISON (UNDIFF)	1	0.672	0.672
			FROBISHER-ALIDA	1	0.520	0.520
			DUPEROW	1	0.080	0.080
			WINNIPEGOSIS	1	0.048	0.048
			INTERLAKE	1	0.050	0.050
5	20	W2	VIKING	1	0.975	0.975
			MANNVILLE	1	1.330	1.330
			MIDALE	1	0.810	0.810
			FROBISHER-ALIDA	1	0.640	0.640
6	20	W2	BIRDBEAR	1	0.620	0.620
8	20	W2	BIRDBEAR	1	0.082	0.082
			INTERLAKE	1	0.051	0.051
			RED RIVER	1	0.054	0.054
9	20	W2	BIRDBEAR	1	0.135	0.135
12	20	W2	MANNVILLE	1	0.240	0.240
			BIRDBEAR	1	0.178	0.178
13	20	W2	FROBISHER-ALIDA	1	0.255	0.255
			BIRDBEAR	1	0.187	0.187
			RED RIVER	1	0.058	0.058
23	20	W2	INTERLAKE	1	0.066	0.066
			WINNIPEG	1	0.086	0.086
40	20	W2	WINNIPEGOSIS	1	0.093	0.093
41	20	W2	WINNIPEGOSIS	1	0.300	0.300
2	21	W2	MIDALE	1	0.210	0.210
3	21	W2	POPLAR	1	0.484	0.484
4	21	W2	POPLAR	1	0.950	0.950
			RATCLIFFE	1	0.650	0.650

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
4	21	W2	MIDALE	1	0.800	0.800
			BIRDBEAR	1	0.800	0.800
			YEOMAN	2	0.047 - 0.055	0.051
6	21	W2	RATCLIFFE	1	0.674	0.674
			MADISON (UNDIFF)	1	0.600	0.600
			BIRDBEAR	1	0.274	0.274
7	21	W2	RATCLIFFE	1	1.040	1.040
			MIDALE	1	0.750	0.750
			BIRDBEAR	1	0.560	0.560
			DUPEROW	1	0.120	0.120
			INTERLAKE	1	0.048	0.048
			RED RIVER	1	0.050	0.050
			WINNIPEG	1	0.048	0.048
8	21	W2	VIKING	1	0.960	0.960
			MANNVILLE	1	1.010	1.010
			LOWER SHAUNAVON	1	0.690	0.690
			MADISON (UNDIFF)	1	0.950	0.950
			BIRDBEAR	1	0.530	0.530
			DUPEROW	1	0.310	0.310
			WINNIPEGOSIS	1	0.052	0.052
			INTERLAKE	1	0.048	0.048
			STONEWALL	1	0.074	0.074
			RED RIVER	2	0.046 - 0.047	0.047
10	21	W2	GRAVELBOURG	1	0.730	0.730
			BIRDBEAR	1	0.440	0.440
11	21	W2	MANNVILLE	1	0.480	0.480
			INTERLAKE	1	0.060	0.060
12	21	W2	MADISON (UNDIFF)	1	0.225	0.225
			BIRDBEAR	1	0.060	0.060
			INTERLAKE	2	0.048 - 0.059	0.054
			WINNIPEG	1	0.053	0.053
14	21	W2	BIRDBEAR	1	0.124	0.124
			RED RIVER	1	0.050	0.050
			WINNIPEG	1	0.053	0.053
			DEADWOOD	1	0.049	0.049
26	21	W2	DUPEROW	1	0.079	0.079
29	21	W2	SOURIS RIVER	1	0.056	0.056
			INTERLAKE	1	0.063	0.063
			WINNIPEG	1	0.062	0.062
43	21	W2	STONEWALL-STONY MOUNTAIN	1	0.203	0.203
3	22	W2	VIKING	1	1.080	1.080
			MADISON (UNDIFF)	2	0.550 - 0.590	0.570
			POPLAR	1	1.620	1.620
			RATCLIFFE	2	0.485 - 0.900	0.693
			BIRDBEAR	1	0.160	0.160
4	22	W2	RATCLIFFE	1	0.720	0.720
			BIRDBEAR	1	0.190	0.190
6	22	W2	BIRDBEAR	1	0.156	0.156
			DUPEROW	1	0.150	0.150
8	22	W2	RED RIVER	1	0.050	0.050
9	22	W2	JURASSIC	1	0.730	0.730
			MADISON (UNDIFF)	1	1.120	1.120
			DUPEROW	1	0.175	0.175
			WINNIPEGOSIS	1	0.058	0.058
			INTERLAKE	1	0.066	0.066
17	22	W2	MANNVILLE	1	0.295	0.295
			MADISON (UNDIFF)	1	0.247	0.247
			DEVONIAN	6	0.080 - 0.128	0.118
			BIRDBEAR	1	0.115	0.115
			INTERLAKE	1	0.083	0.083
28	22	W2	WINNIPEG	2	0.059 - 0.072	0.066
40	22	W2	MANNVILLE	1	0.251	0.251
42	22	W2	ASHERN	1	0.071	0.071
47	22	W2	WINNIPEGOSIS	1	0.850	0.850
1	23	W2	BIRDBEAR	1	0.160	0.160
			DUPEROW	1	0.073	0.073
			INTERLAKE	1	0.071	0.071
			YEOMAN	1	0.061	0.061
2	23	W2	MADISON (UNDIFF)	1	0.900	0.900
			POPLAR	1	1.700	1.700
			BIRDBEAR	1	0.190	0.190
3	23	W2	MANNVILLE	1	1.750	1.750
			MADISON (UNDIFF)	1	0.460	0.460
			POPLAR	1	1.140	1.140
			RATCLIFFE	1	0.680	0.680
5	23	W2	RATCLIFFE	1	0.139	0.139
			BIRDBEAR	1	0.198	0.198
			RED RIVER	1	0.064	0.064
			YEOMAN	1	0.048	0.048
			WINNIPEG	1	0.048	0.048
6	23	W2	BIRDBEAR	1	0.445	0.445
9	23	W2	GRAVELBOURG	1	1.040	1.040
12	23	W2	DUPEROW	1	0.340	0.340
14	23	W2	BIRDBEAR	1	0.153	0.153
			DUPEROW	3	0.144 - 0.158	0.149
			PRAIRIE EVAPORITE	1	0.156	0.156
			ASHERN	1	0.137	0.137
			INTERLAKE	1	0.151	0.151
			WINNIPEG	1	0.074	0.074
18	23	W2	BIRDBEAR	1	0.260	0.260
			DUPEROW	2	0.245 - 0.274	0.260
			SOURIS RIVER	1	0.250	0.250
			DAWSON BAY	2	0.038 - 0.039	0.039
			MIDDLE INTERLAKE	1	0.062	0.062
			LOWER INTERLAKE	1	0.049	0.049
36	23	W2	WINNIPEGOSIS	1	0.058	0.058
50	23	W2	WINNIPEGOSIS	1	1.350	1.350
			WINNIPEG	1	0.420	0.420
3	24	W2	MADISON (UNDIFF)	1	0.180	0.180
			DUPEROW	1	0.072	0.072
			WINNIPEGOSIS	1	0.064	0.064
			INTERLAKE	1	0.052	0.052
			STONEWALL	1	0.055	0.055
			RED RIVER	2	0.050 - 0.052	0.051
			WINNIPEG	1	0.050	0.050
6	24	W2	MADISON (UNDIFF)	1	1.600	1.600
7	24	W2	RATCLIFFE	1	0.930	0.930
10	24	W2	DUPEROW	1	0.360	0.360
12	24	W2	LOWER SHAUNAVON-GRAVELBOURG	1	1.860	1.860
			MADISON (UNDIFF)	1	2.050	2.050
			BIRDBEAR	1	1.170	1.170
			DUPEROW	1	0.780	0.780
14	24	W2	MANNVILLE	1	0.760	0.760
			DUPEROW	1	0.170	0.170

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
14	24	W2	DAWSON BAY	1	0.150	0.150
			WINNIPEGOSIS	1	0.150	0.150
			INTERLAKE	4	0.085 - 0.131	0.109
16	24	W2	MADISON (UNDIFF)	1	0.920	0.920
18	24	W2	BIRDBEAR	1	0.044	0.044
			WINNIPEGOSIS	1	0.043	0.043
61	24	W2	WINNIPEG	1	6.290	6.290
1	25	W2	POPLAR	1	0.083	0.083
			BIRDBEAR	1	0.170	0.170
3	25	W2	MADISON (UNDIFF)	2	0.290 - 0.380	0.335
			BAKKEN	1	0.051	0.051
			BIRDBEAR	1	0.472	0.472
			DUPEROW	2	0.107 - 0.115	0.111
			INTERLAKE	1	0.062	0.062
5	25	W2	GRAVELBOURG	1	0.640	0.640
			MADISON (UNDIFF)	1	0.860	0.860
			BAKKEN	3	0.053 - 0.070	0.062
			BIRDBEAR	1	0.200	0.200
6	25	W2	RATCLIFFE	1	1.040	1.040
10	25	W2	MADISON (UNDIFF)	4	1.820 - 2.330	2.038
			BIRDBEAR	1	1.500	1.500
			DUPEROW	1	1.330	1.330
15	25	W2	DUPEROW	1	0.315	0.315
20	25	W2	BIRDBEAR	1	0.650	0.650
			DUPEROW	1	0.033	0.033
24	25	W2	UPPER SHAUNAVON	1	0.083	0.083
			BIRDBEAR	1	0.078	0.078
			DUPEROW	1	0.136	0.136
27	25	W2	MANNVILLE	1	0.142	0.142
			WINNIPEGOSIS	1	0.048	0.048
			INTERLAKE	2	0.065	0.065
			WINNIPEG	1	0.064	0.064
33	25	W2	JURASSIC	1	0.056	0.056
36	25	W2	INTERLAKE	1	0.058	0.058
54	25	W2	WINNIPEGOSIS	1	1.300	1.300
55	25	W2	WINNIPEGOSIS	5	2.171 - 2.447	2.303
			INTERLAKE	1	1.020	1.020
			WINNIPEG	1	0.845	0.845
4	26	W2	RATCLIFFE	2	1.960 - 2.320	2.140
			BAKKEN	1	0.870	0.870
7	26	W2	MADISON (UNDIFF)	2	1.980 - 2.420	2.200
			BIRDBEAR	1	0.680	0.680
8	26	W2	MADISON (UNDIFF)	1	2.400	2.400
			BIRDBEAR	1	2.500	2.500
10	26	W2	MADISON (UNDIFF)	1	2.370	2.370
			SOURIS VALLEY	1	1.990	1.990
			BIRDBEAR	1	1.970	1.970
			DUPEROW	1	6.030	6.030
			WINNIPEGOSIS	1	0.410	0.410
			INTERLAKE	1	0.180	0.180
			RED RIVER	1	0.079	0.079
			WINNIPEG	1	0.065	0.065
			DEADWOOD	1	0.066	0.066
12	26	W2	BIRDBEAR	1	1.150	1.150
			SOURIS RIVER	1	0.262	0.262
			RED RIVER	1	0.073	0.073
12	26	W2	WINNIPEG	1	0.053	0.053
15	26	W2	STONEWALL	1	0.054	0.054
1	27	W2	MIDALE	1	1.350	1.350
			BIRDBEAR	1	0.650	0.650
			DAWSON BAY	1	0.112	0.112
			INTERLAKE	2	0.089 - 0.100	0.095
			RED RIVER	1	0.121	0.121
			WINNIPEG	1	0.083	0.083
5	27	W2	RATCLIFFE	1	2.300	2.300
			BAKKEN	1	0.400	0.400
7	27	W2	WINNIPEGOSIS	1	0.256	0.256
			RED RIVER	1	0.252	0.252
12	27	W2	BIRDBEAR-DUPEROW	1	3.000	3.000
			STONEWALL	1	0.475	0.475
			WINNIPEG	1	0.058	0.058
19	27	W2	DAWSON BAY	1	0.048	0.048
			WINNIPEG	1	0.046	0.046
20	27	W2	WINNIPEG	1	0.060	0.060
39	27	W2	WINNIPEGOSIS	1	0.067	0.067
56	27	W2	WINNIPEG	1	1.095	1.095
1	28	W2	POPLAR	1	2.310	2.310
			RATCLIFFE	1	2.010	2.010
			SOURIS VALLEY	1	1.510	1.510
			BIRDBEAR	1	0.740	0.740
3	28	W2	MIDALE	1	1.420	1.420
			BIRDBEAR	1	0.660	0.660
			DUPEROW	2	0.470 - 2.350	1.410
			INTERLAKE	1	0.130	0.130
			YEOMAN	1	0.145	0.145
4	28	W2	RATCLIFFE	1	3.000	3.000
			BIRDBEAR	1	3.530	3.530
5	28	W2	MADISON (UNDIFF)	2	2.550 - 2.950	2.750
			DUPEROW	2	1.800 - 2.950	2.375
8	28	W2	COLORADO	1	1.410	1.410
			GRAVELBOURG	1	1.080	1.080
			MADISON (UNDIFF)	1	2.080	2.080
14	28	W2	MADISON (UNDIFF)	1	2.150	2.150
26	28	W2	BIRDBEAR	1	0.300	0.300
			DUPEROW	1	0.158	0.158
27	28	W2	MANNVILLE	1	0.177	0.177
			WINNIPEGOSIS	1	0.053	0.053
			INTERLAKE	1	0.052	0.052
			YEOMAN-WINNIPEG	1	0.050	0.050
32	28	W2	MANNVILLE	2	0.250 - 0.305	0.278
38	28	W2	MANNVILLE	1	0.132	0.132
			WINNIPEGOSIS	1	0.051	0.051
2	29	W2	MADISON (UNDIFF)	2	2.590 - 2.730	2.660
			DUPEROW	2	1.600 - 2.880	2.240
			SOURIS RIVER	2	1.320 - 1.350	1.335
			ASHERN	1	0.640	0.640
			INTERLAKE	2	0.740 - 2.900	1.820
7	29	W2	MANNVILLE	1	2.150	2.150
			RATCLIFFE	1	2.050	2.050
11	29	W2	BELLY RIVER	1	1.330	1.330
			MANNVILLE	2	0.880 - 1.610	1.245

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
11	29	W2	MADISON (UNDIFF)	1	2.760	2.760
12	29	W2	MANNVILLE	1	0.910	0.910
			VANGUARD	1	0.580	0.580
17	29	W2	INTERLAKE	1	0.160	0.160
32	29	W2	MANNVILLE	1	0.215	0.215
			THREE FORKS	1	0.123	0.123
5	30	W2	INTERLAKE	1	1.200	1.200
2	1	W3	ROSERAY	1	2.140	2.140
			MADISON (UNDIFF)	1	3.740	3.740
9	1	W3	MANNVILLE	1	2.120	2.120
			ROSERAY	1	1.430	1.430
			MADISON (UNDIFF)	1	2.130	2.130
			BIRDBEAR	1	1.380	1.380
11	1	W3	MANNVILLE	1	1.280	1.280
			ROSERAY	1	1.180	1.180
17	1	W3	ROSERAY	1	0.500	0.500
19	1	W3	WINNIPEGOSIS	1	0.280	0.280
			DEADWOOD	1	0.069	0.069
20	1	W3	ROSERAY	1	0.525	0.525
23	1	W3	WINNIPEGOSIS	1	0.070	0.070
			WINNIPEG	1	0.086	0.086
25	1	W3	DUPEROW	1	0.340	0.340
33	1	W3	ASHERN	1	0.056	0.056
			DEADWOOD	1	0.062	0.062
34	1	W3	INTERLAKE	1	0.079	0.079
37	1	W3	WINNIPEGOSIS	1	0.053	0.053
			INTERLAKE	1	0.049	0.049
			WINNIPEG	1	0.047	0.047
38	1	W3	WINNIPEGOSIS-ASHERN-WINNIPEG	1	0.065	0.065
			INTERLAKE	1	0.055	0.055
46	1	W3	STONEWALL-STONY MOUNTAIN	1	0.220	0.220
5	2	W3	ROSERAY	1	2.390	2.390
			MADISON (UNDIFF)	2	2.900 - 3.000	2.950
			DUPEROW	1	3.300	3.300
21	2	W3	ROSERAY	1	0.930	0.930
			GRAVELBOURG	1	0.534	0.534
			DAWSON BAY	1	0.340	0.340
			INTERLAKE	1	0.073	0.073
51	2	W3	DAWSON BAY	1	0.930	0.930
			WINNIPEGOSIS	1	0.730	0.730
			INTERLAKE	1	0.590	0.590
			RED RIVER	1	0.300	0.300
52	2	W3	DAWSON BAY	1	0.860	0.860
			WINNIPEGOSIS	1	1.240	1.240
			INTERLAKE	1	1.260	1.260
			WINNIPEG	1	0.390	0.390
64	2	W3	SOURIS RIVER	1	9.270	9.270
			DEADWOOD	1	1.780	1.780
2	3	W3	RATCLIFFE-MIDALE	1	2.230	2.230
			BIRDBEAR	1	2.200	2.200
			DUPEROW	1	3.110	3.110
			WINNIPEGOSIS-INTERLAKE	1	2.210	2.210
			INTERLAKE	1	1.800	1.800
			STONEWALL-STONY MOUNTAIN	1	2.000	2.000
			STONY MOUNTAIN	1	2.090	2.090
			WINNIPEG	1	2.290	2.290
3	3	W3	MADISON (UNDIFF)	2	2.450 - 2.600	2.525
			DAWSON BAY	1	2.040	2.040
4	3	W3	MANNVILLE	1	2.490	2.490
			DUPEROW	1	3.240	3.240
8	3	W3	UPPER VANGUARD	1	2.310	2.310
			MADISON (UNDIFF)	1	3.020	3.020
			BIRDBEAR	1	2.710	2.710
13	3	W3	MANNVILLE	1	1.500	1.500
			ROSERAY	1	1.300	1.300
			MADISON (UNDIFF)	1	1.140	1.140
15	3	W3	MADISON (UNDIFF)	1	3.170	3.170
17	3	W3	MADISON (UNDIFF)	1	1.940	1.940
20	3	W3	BIRDBEAR	1	1.130	1.130
21	3	W3	MANNVILLE	1	1.000	1.000
			ROSERAY	1	1.150	1.150
34	3	W3	PRAIRIE EVAPORITE-WINNIPEGOSIS	1	0.077	0.077
			INTERLAKE	1	0.063	0.063
6	4	W3	BIRDBEAR	1	1.560	1.560
			DUPEROW	1	1.650	1.650
			SOURIS RIVER	1	0.300	0.300
			INTERLAKE	1	2.750	2.750
			WINNIPEG	1	2.140	2.140
8	4	W3	SOURIS RIVER	2	0.860 - 1.350	1.105
9	4	W3	MADISON (UNDIFF)	1	2.200	2.200
			BIRDBEAR	2	2.220 - 2.350	2.285
			DUPEROW	2	1.050 - 1.720	1.385
			WINNIPEG	1	2.450	2.450
10	4	W3	ROSERAY	1	1.490	1.490
			MADISON (UNDIFF)	1	2.200	2.200
			BIRDBEAR	1	2.700	2.700
			DUPEROW	1	2.710	2.710
			INTERLAKE	1	2.910	2.910
			RED RIVER	1	1.740	1.740
			WINNIPEG	1	3.020	3.020
17	4	W3	MANNVILLE	1	1.300	1.300
			MADISON (UNDIFF)	1	2.000	2.000
26	4	W3	LOWER SHAUNAVON	1	0.650	0.650
			GRAVELBOURG	1	0.650	0.650
			MADISON (UNDIFF)	1	0.390	0.390
			BIRDBEAR	1	0.460	0.460
			DUPEROW	3	0.248 - 0.390	0.299
			SOURIS RIVER	1	0.154	0.154
			DAWSON BAY	1	0.106	0.106
			WINNIPEGOSIS	1	0.083	0.083
			INTERLAKE	1	0.101	0.101
39	4	W3	DAWSON BAY	1	0.053	0.053
			ASHERN	1	0.055	0.055
47	4	W3	STONEWALL-STONY MOUNTAIN	1	0.147	0.147
26	5	W3	SOURIS VALLEY	1	0.450	0.450
			BIRDBEAR	1	0.720	0.720

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AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
26	5	W3	DUPEROW	1	0.372	0.372
			DAWSON BAY	1	0.120	0.120
29	5	W3	DUPEROW	2	0.320	0.320
			WINNIPEGOSIS	1	0.102	0.102
			STONEWALL-STONY MOUNTAIN	1	0.085	0.085
48	5	W3	SOURIS RIVER	1	0.224	0.224
63	5	W3	SOURIS RIVER	1	10.000	10.000
			DAWSON BAY	1	7.550	7.550
1	6	W3	MANNVILLE	1	3.260	3.260
3	6	W3	MADISON (UNDIFF)	1	2.820	2.820
			BIRDBEAR	1	2.800	2.800
			WINNIPEGOSIS	1	2.700	2.700
			INTERLAKE	1	2.900	2.900
9	6	W3	MANNVILLE	2	2.170 - 2.400	2.285
10	6	W3	MADISON (UNDIFF)	1	2.520	2.520
15	6	W3	SOURIS RIVER	1	1.520	1.520
			WINNIPEGOSIS	1	0.410	0.410
			INTERLAKE	1	0.960	0.960
			RED RIVER	1	0.112	0.112
			DEADWOOD	2	0.063 - 0.108	0.088
16	6	W3	ROSERAY	1	0.117	0.117
19	6	W3	BELLY RIVER	3	0.755 - 0.975	0.895
			MANNVILLE	1	3.800	3.800
			ROSERAY	1	1.780	1.780
			LOWER SHAUNAVON	1	1.400	1.400
20	6	W3	MANNVILLE	2	1.162 - 1.218	1.190
23	6	W3	BIRDBEAR	1	1.380	1.380
			DUPEROW	2	0.140 - 0.330	0.235
			INTERLAKE	1	2.700	2.700
37	6	W3	WINNIPEGOSIS	1	0.055	0.055
			INTERLAKE	1	0.066	0.066
2	7	W3	MADISON (UNDIFF)	1	1.800	1.800
9	7	W3	ROSERAY	1	1.900	1.900
16	7	W3	CANTUAR	1	1.260	1.260
			MADISON (UNDIFF)	1	1.580	1.580
			BIRDBEAR	1	1.240	1.240
19	7	W3	MANNVILLE	1	3.220	3.220
30	7	W3	MANNVILLE	1	1.110	1.110
			INTERLAKE	1	0.054	0.054
34	7	W3	WINNIPEGOSIS	1	0.075	0.075
35	7	W3	DUPEROW	2	0.133 - 0.205	0.169
5	8	W3	ASHERN-INTERLAKE	1	3.080	3.080
			WINNIPEG	1	2.870	2.870
			DEADWOOD	1	0.084	0.084
6	8	W3	MANNVILLE	1	1.850	1.850
			CANTUAR	1	2.000	2.000
			MADISON (UNDIFF)	1	2.570	2.570
7	8	W3	MANNVILLE	1	1.680	1.680
			GRAVELBOURG	1	0.970	0.970
8	8	W3	LOWER COLORADO	1	1.680	1.680
			VIKING	1	0.720	0.720
			ROSERAY	1	1.540	1.540
10	8	W3	ROSERAY	1	1.540	1.540
			BIRDBEAR	1	2.450	2.450
11	8	W3	GRAVELBOURG	1	1.410	1.410
14	8	W3	ROSERAY	1	0.120	0.120
17	8	W3	MANNVILLE	1	1.620	1.620
			SOURIS RIVER	2	0.579 - 1.280	0.930
19	8	W3	BASAL MANNVILLE	1	1.430	1.430
31	8	W3	BIRDBEAR	1	0.200	0.200
			DUPEROW	1	0.236	0.236
			STONEWALL	1	0.068	0.068
			RED RIVER	1	0.048	0.048
32	8	W3	BIRDBEAR	1	0.150	0.150
			INTERLAKE	1	0.071	0.071
35	8	W3	STONY MOUNTAIN	1	0.056	0.056
			DEADWOOD	4	0.045 - 0.050	0.048
63	8	W3	MANNVILLE	1	8.600	8.600
			DEADWOOD	1	2.080	2.080
1	9	W3	BASAL CANTUAR	1	1.700	1.700
			UPPER ROSERAY	1	1.580	1.580
			ROSERAY	2	2.390 - 2.800	2.595
3	9	W3	MANNVILLE	1	1.480	1.480
			MADISON (UNDIFF)	1	3.360	3.360
4	9	W3	MANNVILLE	1	1.850	1.850
			MADISON (UNDIFF)	2	2.520 - 2.740	2.630
6	9	W3	MADISON (UNDIFF)	1	2.390	2.390
			DUPEROW	1	1.600	1.600
7	9	W3	VIKING	1	0.937	0.937
			MANNVILLE	1	1.485	1.485
			ROSERAY	1	1.370	1.370
			GRAVELBOURG	1	0.242	0.242
			MADISON (UNDIFF)	1	2.376	2.376
8	9	W3	LOWER SHAUNAVON	1	1.500	1.500
15	9	W3	CANTUAR	1	1.520	1.520
4	10	W3	UPPER GRAVELBOURG	1	1.600	1.600
9	10	W3	MANNVILLE	1	1.700	1.700
			CANTUAR	1	1.500	1.500
			ROSERAY	1	1.400	1.400
			GRAVELBOURG	1	1.200	1.200
14	10	W3	MANNVILLE	1	2.070	2.070
			DUPEROW	1	2.300	2.300
			DEADWOOD	1	1.350	1.350
15	10	W3	CANTUAR	1	1.580	1.580
19	10	W3	CANTUAR	1	1.460	1.460
20	10	W3	GRAVELBOURG	1	1.620	1.620
			BIRDBEAR	1	0.930	0.930
22	10	W3	MANNVILLE	1	1.150	1.150
			GRAVELBOURG	1	1.180	1.180
			BIRDBEAR	1	1.430	1.430
24	10	W3	SOURIS VALLEY	1	0.450	0.450
			DUPEROW	2	0.450 - 0.750	0.600
			DAWSON BAY	1	0.122	0.122

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
24	10	W3	PRAIRIE EVAPORITE-WINNIPEGOSIS	1	0.094	0.094
			INTERLAKE	2	0.080 - 0.085	0.083
			STONEWALL	1	0.080	0.080
			RED RIVER	1	0.055	0.055
27	10	W3	MANNVILLE	2	1.240 - 1.280	1.260
			BAKKEN	1	0.970	0.970
			BIRDBEAR	1	0.277	0.277
60	10	W3	DEVONIAN	1	7.480	7.480
			WINNIPEGOSIS	1	5.900	5.900
2	11	W3	BIRDBEAR	1	2.720	2.720
			SOURIS RIVER	1	3.340	3.340
7	11	W3	MADISON (UNDIFF)	1	4.100	4.100
12	11	W3	VIKING	1	0.620	0.620
16	11	W3	CANTUAR	1	1.580	1.580
18	11	W3	CANTUAR	3	1.740 - 2.160	1.890
19	11	W3	BASAL MANNVILLE	1	1.320	1.320
			MADISON (UNDIFF)	1	1.450	1.450
21	11	W3	DUPEROW	1	0.136	0.136
			WINNIPEGOSIS	1	0.062	0.062
23	11	W3	DUPEROW	1	0.970	0.970
			DAWSON BAY	1	0.064	0.064
			INTERLAKE	1	0.067	0.067
27	11	W3	DUPEROW	2	0.132 - 0.140	0.136
			SOURIS RIVER	1	0.110	0.110
			INTERLAKE	1	0.089	0.089
29	11	W3	MANNVILLE	1	1.480	1.480
30	11	W3	MANNVILLE	1	0.830	0.830
60	11	W3	DAWSON BAY	1	4.330	4.330
			WINNIPEGOSIS	1	2.240	2.240
1	12	W3	WINNIPEGOSIS-ASHERN-INTERLAKE	1	3.080	3.080
5	12	W3	MANNVILLE	1	1.750	1.750
			ROSERAY	1	2.150	2.150
13	12	W3	MADISON (UNDIFF)	1	2.250	2.250
			BIRDBEAR	1	0.690	0.690
			DUPEROW	1	1.080	1.080
			SOURIS RIVER-DAWSON BAY-WINNIPEGOSIS	1	2.170	2.170
16	12	W3	CANTUAR	2	1.950 - 2.050	2.000
18	12	W3	CANTUAR	1	1.200	1.200
			ROSERAY	1	1.500	1.500
30	12	W3	MANNVILLE	1	0.930	0.930
			BIRDBEAR	1	0.950	0.950
37	12	W3	MANNVILLE	1	0.105	0.105
58	12	W3	SOURIS RIVER	1	0.203	0.203
60	12	W3	SOURIS RIVER	1	1.270	1.270
			WINNIPEGOSIS	1	1.880	1.880
1	13	W3	MADISON (UNDIFF)	1	1.540	1.540
			BIRDBEAR	1	2.370	2.370
			INTERLAKE	1	3.510	3.510
2	13	W3	VIKING	1	1.750	1.750
			MANNVILLE	1	2.850	2.850
11	13	W3	CANTUAR	1	1.100	1.100
13	13	W3	ROSERAY	1	0.845	0.845
14	13	W3	ROSERAY	1	1.170	1.170
15	13	W3	CANTUAR	1	1.020	1.020
17	13	W3	MANNVILLE	1	1.710	1.710
			CANTUAR	1	1.350	1.350
			ROSERAY	1	1.440	1.440
18	13	W3	CANTUAR	1	1.230	1.230
19	13	W3	VIKING	1	0.635	0.635
			MANNVILLE	2	1.450 - 1.580	1.515
			CANTUAR	1	1.100	1.100
25	13	W3	VIKING	1	0.850	0.850
			MANNVILLE	1	1.500	1.500
27	13	W3	MANNVILLE	3	0.300 - 1.850	1.177
			WINNIPEGOSIS	1	0.059	0.059
29	13	W3	BAKKEN	1	0.970	0.970
39	13	W3	MANNVILLE	1	0.111	0.111
46	13	W3	VIKING	1	0.150	0.150
			DUPEROW-SOURIS RIVER	1	0.108	0.108
			SOURIS RIVER	1	0.098	0.098
			DAWSON BAY	1	0.060	0.060
47	13	W3	DAWSON BAY	1	0.074	0.074
66	13	W3	WINNIPEGOSIS	1	0.104	0.104
			DEADWOOD	1	0.335	0.335
1	14	W3	MANNVILLE	1	1.100	1.100
			MADISON (UNDIFF)	1	2.780	2.780
4	14	W3	BASAL MANNVILLE	1	1.260	1.260
			ROSERAY	2	1.200	1.200
5	14	W3	ROSERAY	1	2.340	2.340
11	14	W3	CANTUAR	2	0.826 - 0.910	0.868
			ROSERAY	1	1.320	1.320
13	14	W3	CANTUAR	1	0.900	0.900
14	14	W3	CANTUAR	1	0.960	0.960
			ROSERAY	1	0.950	0.950
17	14	W3	CANTUAR	2	1.390 - 1.400	1.395
			ROSERAY	3	1.240 - 1.880	1.490
			BIRDBEAR	1	0.430	0.430
			DUPEROW	3	0.380 - 0.440	0.418
			SOURIS RIVER	3	0.099 - 0.223	0.174
			INTERLAKE	2	0.084 - 0.170	0.127
			DEADWOOD	3	0.110 - 0.143	0.124
18	14	W3	ROSERAY	2	1.280 - 1.570	1.425
19	14	W3	VIKING	1	0.570	0.570
			SPINNEY HILL	1	1.350	1.350
			MANNVILLE	1	1.400	1.400
			CANTUAR	1	1.060	1.060
20	14	W3	VIKING	1	0.700	0.700
21	14	W3	VIKING	2	0.660 - 0.700	0.680

RESISTIVITY OF FORMATION WATERS @ 20ºC

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
22	14	W3	VIKING	1	0.670	0.670
23	14	W3	VIKING	1	1.100	1.100
26	14	W3	SPINNEY HILL	1	1.280	1.280
29	14	W3	DUPEROW	1	0.163	0.163
35	14	W3	MANNVILLE	1	0.150	0.150
46	14	W3	DAWSON BAY	1	0.061	0.061
56	14	W3	WINNIPEGOSIS	1	0.370	0.370
			DEADWOOD	2	0.380 - 0.390	0.385
58	14	W3	WINNIPEGOSIS	1	0.258	0.258
63	14	W3	WINNIPEGOSIS	1	0.590	0.590
12	15	W3	ROSERAY	1	0.830	0.830
15	15	W3	CANTUAR	1	0.840	0.840
			ROSERAY	3	0.910 - 0.980	0.950
16	15	W3	CANTUAR	4	0.960 - 1.070	1.008
			ROSERAY	2	0.670 - 0.835	0.753
17	15	W3	MANNVILLE	3	1.100 - 1.720	1.307
			CANTUAR	4	1.040 - 2.000	1.535
			ROSERAY	3	1.780 - 2.230	1.953
			UPPER SHAUNAVON	1	1.740	1.740
			LOWER SHAUNAVON	3	1.250 - 1.600	1.380
			MADISON (UNDIFF)	2	1.070 - 1.650	1.360
18	15	W3	CANTUAR	1	2.050	2.050
23	15	W3	VIKING	1	0.620	0.620
33	15	W3	INTERLAKE	1	0.057	0.057
34	15	W3	MANNVILLE	1	0.160	0.160
			BIRDBEAR	1	0.099	0.099
51	15	W3	WINNIPEGOSIS	1	0.096	0.096
60	15	W3	MANNVILLE	1	5.800	5.800
			DEADWOOD	1	0.300	0.300
61	15	W3	WINNIPEGOSIS	1	0.480	0.480
			DEADWOOD	1	0.420	0.420
64	15	W3	DEADWOOD	1	0.510	0.510
68	15	W3	WINNIPEGOSIS	1	0.350 - 0.359	0.359
			WINNIPEGOSIS-ASHERN	1	0.284	0.284
			MEADOW LAKE	2	0.427 - 0.481	0.454
1	16	W3	UPPER SHAUNAVON	1	0.755	0.755
13	16	W3	CANTUAR	1	0.770	0.770
			BASAL MANNVILLE	1	0.690	0.690
			ROSERAY	1	0.700	0.700
14	16	W3	ROSERAY	1	0.667	0.667
			LOWER ROSERAY	1	0.698	0.698
15	16	W3	CANTUAR	2	0.720 - 0.900	0.810
			ROSERAY	4	0.780 - 1.630	1.135
16	16	W3	MANNVILLE	5	0.880 - 1.830	1.146
			CANTUAR	2	0.935 - 0.960	0.948
			BASAL CANTUAR	1	1.280	1.280
			BASAL CANTUAR-ROSERAY	1	0.960	0.960
			ROSERAY	11	0.745 - 1.400	0.989
			LOWER SHAUNAVON	4	0.662 - 1.500	1.146
17	16	W3	ROSERAY	8	0.550 - 1.280	1.031
			BIRDBEAR	1	0.820	0.820
			DUPEROW	3	0.076 - 0.500	0.225
			INTERLAKE	1	0.059	0.059
18	16	W3	MANNVILLE	1	0.710	0.710
			UPPER SHAUNAVON	1	1.380	1.380
19	16	W3	UPPER SHAUNAVON	1	1.220	1.220
			LOWER SHAUNAVON	1	1.210	1.210
23	16	W3	LOWER COLORADO	1	0.580	0.580
			VIKING	1	0.480	0.480
24	16	W3	VIKING	2	0.740	0.740
26	16	W3	SPINNEY HILL	1	1.200	1.200
32	16	W3	BIRDBEAR	1	0.095	0.095
33	16	W3	MANNVILLE	1	0.160	0.160
			BIRDBEAR	1	0.117	0.117
34	16	W3	MANNVILLE	4	0.124 - 0.165	0.140
			BAKKEN	1	0.128	0.128
			BIRDBEAR	3	0.124 - 0.155	0.136
38	16	W3	MANNVILLE	2	0.145 - 0.148	0.147
45	16	W3	WINNIPEGOSIS	1	0.048	0.048
59	16	W3	MANNVILLE	2	1.520 - 1.970	1.745
			DAWSON BAY	1	0.590	0.590
			WINNIPEGOSIS	1	0.380	0.380
			DEADWOOD	1	0.310	0.310
66	16	W3	MEADOW LAKE	1	0.212	0.212
2	17	W3	UPPER SHAUNAVON	1	0.395	0.395
			MADISON (UNDIFF)	1	1.700	1.700
3	17	W3	BELLY RIVER	1	5.320	5.320
6	17	W3	DAWSON BAY	1	1.400	1.400
8	17	W3	CANTUAR	1	0.650	0.650
9	17	W3	MADISON (UNDIFF)	1	1.850	1.850
10	17	W3	BASAL MANNVILLE	1	0.540	0.540
			UPPER SHAUNAVON	1	0.562	0.562
11	17	W3	UPPER SHAUNAVON	4	0.587 - 0.810	0.697
12	17	W3	BELLY RIVER	2	3.240 - 3.500	3.370
			UPPER SHAUNAVON	2	0.650 - 0.690	0.670
13	17	W3	ROSERAY	2	0.700 - 0.800	0.750
14	17	W3	ROSERAY	1	0.680	0.680
15	17	W3	MANNVILLE	1	0.913	0.913
			CANTUAR	9	0.530 - 0.730	0.637
			BASAL CANTUAR	1	0.661	0.661
			CANTUAR-ROSERAY	1	0.570	0.570
			UPPER ROSERAY	1	0.902	0.902
			ROSERAY	3	0.610 - 1.000	0.756
16	17	W3	CANTUAR	2	0.820 - 0.880	0.850
			ROSERAY	3	0.735 - 0.880	0.798
			LOWER ROSERAY	2	0.880 - 0.900	0.890
			UPPER SHAUNAVON	1	0.860	0.860
			MADISON (UNDIFF)	1	1.420	1.420
			DUPEROW	3	0.062 - 0.700	0.313
			SOURIS RIVER	1	0.192	0.192
			WINNIPEGOSIS	1	0.067	0.067

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
16	17	W3	INTERLAKE	2	0.069 - 0.071	0.070
17	17	W3	CANTUAR	4	0.850 - 1.120	0.985
			ROSERAY	1	1.410	1.410
			UPPER SHAUNAVON	1	1.280	1.280
18	17	W3	BELLY RIVER	2	2.600 - 6.500	4.550
			CANTUAR	2	1.050 - 1.370	1.210
			ROSERAY	28	0.610 - 2.700	1.274
			UPPER SHAUNAVON	5	1.060 - 1.764	1.415
			UPPER-LOWER SHAUNAVON	1	1.360	1.360
19	17	W3	CANTUAR	5	0.835 - 1.180	0.953
			ROSERAY	1	0.860	0.860
			UPPER SHAUNAVON	3	1.040 - 1.640	1.280
20	17	W3	CANTUAR	1	0.780	0.780
22	17	W3	VIKING	1	0.610	0.610
23	17	W3	VIKING	2	0.490 - 0.590	0.540
24	17	W3	VIKING	3	0.490 - 0.660	0.572
25	17	W3	VIKING	2	0.760 - 0.880	0.820
			MANNVILLE	1	0.760	0.760
26	17	W3	MADISON (UNDIFF)	1	0.400	0.400
			WINNIPEGOSIS	1	0.049	0.049
			ASHERN	1	0.047	0.047
27	17	W3	VIKING	1	0.853	0.853
28	17	W3	VIKING	1	1.110	1.110
31	17	W3	MANNVILLE	1	0.203	0.203
46	17	W3	MANNVILLE	1	0.355	0.355
47	17	W3	SPINNEY HILL	1	0.230	0.230
56	17	W3	DEADWOOD	2	0.151 - 0.152	0.152
58	17	W3	MEADOW LAKE	1	0.440	0.440
9	18	W3	RAVENSCRAG	1	7.900	7.900
			BELLY RIVER	1	4.280	4.280
			UPPER SHAUNAVON	3	0.440 - 1.130	0.790
10	18	W3	UPPER SHAUNAVON	1	1.300	1.300
			LOWER SHAUNAVON	2	0.415 - 0.620	0.518
11	18	W3	BASAL MANNVILLE	1	0.540	0.540
			UPPER SHAUNAVON	2	0.460 - 0.490	0.475
12	18	W3	ROSERAY	1	0.680	0.680
			UPPER SHAUNAVON	13	0.523 - 1.630	1.060
13	18	W3	ROSERAY	3	0.520 - 0.810	0.673
			UPPER SHAUNAVON	2	0.920 - 1.130	1.025
14	18	W3	ROSERAY	3	0.750 - 0.940	0.813
			BIRDBEAR	1	0.550	0.550
			DUPEROW	3	0.108 - 0.540	0.264
15	18	W3	MANNVILLE	1	0.710	0.710
			CANTUAR	1	0.660	0.660
			CANTUAR-ROSERAY	1	0.750	0.750
			ROSERAY	6	0.580 - 0.840	0.727
			UPPER SHAUNAVON	4	0.715 - 0.850	0.794
16	18	W3	MANNVILLE	1	0.760	0.760
			CANTUAR	6	0.560 - 0.870	0.653
			BASAL CANTUAR	1	0.500	0.500
			ROSERAY	9	0.500 - 0.900	0.734
17	18	W3	BELLY RIVER	1	2.050	2.050
			MANNVILLE	4	0.660 - 1.150	0.820
			CANTUAR	2	0.785 - 0.920	0.853
			ROSERAY	11	0.790 - 1.380	0.912
			BIRDBEAR	1	1.070	1.070
			DUPEROW	5	0.080 - 0.200	0.132
			SOURIS RIVER	2	0.080 - 0.090	0.085
18	18	W3	CANTUAR	2	0.870 - 0.960	0.915
			UPPER SHAUNAVON	3	0.785 - 1.330	1.122
			LOWER SHAUNAVON	4	1.020 - 1.420	1.243
24	18	W3	VIKING	2	0.500 - 0.590	0.545
25	18	W3	VIKING	1	0.265	0.265
28	18	W3	MANNVILLE	1	0.920	0.920
			VIKING	1	0.213	0.213
29	18	W3	STONY MOUNTAIN	1	0.050	0.050
32	18	W3	MANNVILLE	1	0.595	0.595
			BAKKEN	1	0.580	0.580
33	18	W3	MANNVILLE	3	0.340 - 0.373	0.351
46	18	W3	MANNVILLE	24	0.041 - 3.820	0.800
49	18	W3	SOURIS RIVER	1	0.085	0.085
51	18	W3	DAWSON BAY	1	0.072	0.072
55	18	W3	ST. WALBURG	1	0.374	0.374
4	19	W3	BELLY RIVER	1	2.300	2.300
7	19	W3	MANNVILLE	1	0.670	0.670
			UPPER SHAUNAVON	2	0.345 - 0.410	0.378
8	19	W3	BELLY RIVER	7	4.200 - 4.550	4.326
			UPPER SHAUNAVON	1	0.675	0.675
			SHAUNAVON	2	0.370 - 0.400	0.385
			LOWER SHAUNAVON	1	0.357	0.357
9	19	W3	BELLY RIVER	1	4.450	4.450
			SHAUNAVON	1	0.430	0.430
10	19	W3	BELLY RIVER	1	2.400	2.400
			UPPER SHAUNAVON	1	1.600	1.600
11	19	W3	BELLY RIVER	1	3.300	3.300
			UPPER SHAUNAVON	3	0.420 - 0.510	0.463
12	19	W3	BASAL CANTUAR	1	0.625	0.625
			ROSERAY	2	0.560 - 0.580	0.570
			UPPER SHAUNAVON	3	0.500 - 0.600	0.537
13	19	W3	BELLY RIVER	2	2.260 - 2.730	2.495
			MANNVILLE	1	0.780	0.780
			CANTUAR	3	0.530 - 0.600	0.557
			BASAL CANTUAR	2	0.530	0.530
			ROSERAY	12	0.530 - 0.880	0.691
			UPPER SHAUNAVON	11	0.540 - 0.923	0.721
			LOWER SHAUNAVON	1	0.600	0.600
			GRAVELBOURG	2	0.690 - 0.796	0.743
			MADISON (UNDIFF)	1	1.470	1.470
14	19	W3	BELLY RIVER	1	2.200	2.200
			MANNVILLE	2	0.610	0.610
			CANTUAR	1	0.460	0.460
			BASAL CANTUAR	1	0.581	0.581
			ROSERAY	7	0.412 - 0.800	0.654
			UPPER SHAUNAVON	7	0.505 - 1.080	0.728
			GRAVELBOURG	1	0.555	0.555
			BIRDBEAR	1	0.124	0.124
			DUPEROW	5	0.046 - 0.178	0.104

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
15	19	W3	BELLY RIVER	1	2.520	2.520
			MANNVILLE	1	0.670	0.670
			BASAL MANNVILLE	1	0.542	0.542
			UPPER SHAUNAVON	4	0.500 - 0.690	0.560
			LOWER SHAUNAVON	1	0.690	0.690
16	19	W3	MANNVILLE	1	0.750	0.750
			CANTUAR	1	0.750	0.750
			BASAL MANNVILLE	2	0.450 - 0.550	0.500
			ROSERAY	8	0.420 - 0.880	0.674
			UPPER SHAUNAVON	4	0.590 - 0.900	0.761
			LOWER SHAUNAVON	1	1.200	1.200
17	19	W3	ROSERAY	2	0.675 - 0.860	0.768
			LOWER ROSERAY	1	0.970	0.970
			UPPER SHAUNAVON	2	0.640 - 0.950	0.795
18	19	W3	BASAL MANNVILLE- UPPER SHAUNAVON	1	0.950	0.950
			UPPER SHAUNAVON	2	0.690 - 0.830	0.760
21	19	W3	VIKING	1	0.530	0.530
22	19	W3	BASAL CANTUAR	1	0.582	0.582
25	19	W3	VIKING	3	0.590 - 0.640	0.621
28	19	W3	VIKING	1	0.825	0.825
29	19	W3	MANNVILLE	1	1.110	1.110
31	19	W3	VIKING	1	0.725	0.725
			SPINNEY HILL	1	0.740	0.740
32	19	W3	MANNVILLE	5	0.445 - 0.777	0.574
			THREE FORKS	1	0.440	0.440
35	19	W3	MANNVILLE	1	0.301	0.301
36	19	W3	DUPEROW	4	0.242 - 0.814	0.598
37	19	W3	MANNVILLE	11	0.276 - 0.822	0.407
38	19	W3	MANNVILLE	1	0.300	0.300
39	19	W3	BASAL MANNVILLE	2	0.240 - 0.242	0.241
40	19	W3	VIKING	1	0.410	0.410
			MANNVILLE	4	0.267 - 0.335	0.295
			UNITY	1	0.340	0.340
45	19	W3	MANNVILLE	26	0.109 - 0.200	0.129
48	19	W3	MANNVILLE	36	0.012 - 2.150	0.472
58	19	W3	WINNIPEGOSIS	1	0.252	0.252
			DEADWOOD	1	0.147	0.147
60	19	W3	MANNVILLE	1	2.390	2.390
63	19	W3	WINNIPEGOSIS	1	0.186	0.186
2	20	W3	UPPER SHAUNAVON	1	1.020	1.020
			MADISON (UNDIFF)	1	0.709	0.709
3	20	W3	VIKING	1	0.580	0.580
			CANTUAR	1	0.710	0.710
			BASAL MANNVILLE	1	0.720	0.720
			UPPER SHAUNAVON	1	0.494	0.494
4	20	W3	BELLY RIVER	2	4.500 - 4.660	4.580
			UPPER SHAUNAVON	3	0.310 - 0.421	0.361
5	20	W3	BELLY RIVER	3	1.840 - 2.400	2.057
			UPPER SHAUNAVON	5	0.280 - 0.390	0.338
6	20	W3	SHAUNAVON	1	0.350	0.350
6	20	W3	GRAVELBOURG	1	0.165	0.165
7	20	W3	BELLY RIVER	2	2.050 - 2.200	2.125
			VIKING	2	0.600 - 0.610	0.605
			MANNVILLE	1	0.600	0.600
			UPPER SHAUNAVON	3	0.460 - 0.580	0.527
			LOWER SHAUNAVON	1	0.700	0.700
11	20	W3	UPPER SHAUNAVON	1	0.560	0.560
			LOWER SHAUNAVON	1	0.420	0.420
12	20	W3	UPPER SHAUNAVON	1	0.700	0.700
13	20	W3	CANTUAR	1	0.570	0.570
			UPPER SHAUNAVON	4	0.440 - 0.800	0.557
			MADISON (UNDIFF)	1	0.480	0.480
14	20	W3	ROSERAY	2	0.605 - 1.020	0.813
			UPPER SHAUNAVON	3	0.540 - 0.615	0.588
15	20	W3	UPPER SHAUNAVON	2	0.720 - 0.780	0.750
16	20	W3	UPPER SHAUNAVON	3	0.540 - 0.720	0.637
17	20	W3	ROSERAY	1	0.558	0.558
			UPPER SHAUNAVON	1	0.790	0.790
			UPPER-LOWER SHAUNAVON	1	0.560	0.560
21	20	W3	VIKING	1	0.490	0.490
			SOURIS RIVER	1	0.054	0.054
22	20	W3	MANNVILLE	1	0.323	0.323
23	20	W3	VIKING	1	0.494	0.494
28	20	W3	VIKING	2	0.421 - 0.480	0.451
31	20	W3	BELLY RIVER	1	3.640	3.640
			MANNVILLE	2	0.463 - 0.541	0.502
32	20	W3	MANNVILLE	6	0.362 - 0.734	0.548
			BAKKEN	1	0.362	0.362
33	20	W3	MANNVILLE	8	0.373 - 0.469	0.411
36	20	W3	DUPEROW	1	0.140	0.140
37	20	W3	MANNVILLE	1	0.305	0.305
38	20	W3	MANNVILLE	2	0.453 - 0.480	0.467
39	20	W3	MANNVILLE	5	0.329 - 0.765	0.450
40	20	W3	MANNVILLE	1	0.318	0.318
41	20	W3	MANNVILLE	3	0.085 - 0.530	0.310
43	20	W3	MANNVILLE	2	0.083 - 0.120	0.102
44	20	W3	MANNVILLE	2	0.118 - 0.420	0.269
48	20	W3	MANNVILLE	21	0.121 - 0.300	0.173
49	20	W3	MANNVILLE	6	0.122 - 0.203	0.151
			DEADWOOD	1	0.042	0.042
50	20	W3	MANNVILLE	2	0.117 - 0.168	0.143
			SOURIS RIVER	1	0.085	0.085
			DAWSON BAY	1	0.056	0.056
51	20	W3	MANNVILLE	4	0.161 - 0.165	0.163
54	20	W3	CUMMINGS	1	1.180	1.180
57	20	W3	MANNVILLE	1	3.320	3.320

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
60	20	W3	SOURIS RIVER	1	0.470	0.470
			WINNIPEGOSIS	1	0.170	0.170
			DEADWOOD	2	0.100 - 0.130	0.115
61	20	W3	MANNVILLE	1	1.530	1.530
			WINNIPEGOSIS	1	0.123	0.123
62	20	W3	MANNVILLE	1	1.620	1.620
1	21	W3	BELLY RIVER	1	4.460	4.460
2	21	W3	UPPER SHAUNAVON	1	0.720	0.720
3	21	W3	UPPER SHAUNAVON	1	0.790	0.790
			MADISON (UNDIFF)	1	0.192	0.192
4	21	W3	UPPER SHAUNAVON	1	0.570	0.570
7	21	W3	UPPER SHAUNAVON	2	0.445 - 0.460	0.453
10	21	W3	UPPER SHAUNAVON	1	0.515	0.515
			UPPER-LOWER SHAUNAVON	1	0.520	0.520
11	21	W3	UPPER SHUANAVON	1	0.725	0.725
13	21	W3	VIKING	1	0.495	0.495
			UPPER SHAUNAVON	1	0.520	0.520
14	21	W3	UPPER SHAUNAVON	1	0.483	0.483
17	21	W3	UPPER-LOWER SHAUNAVON	1	0.560	0.560
18	21	W3	GRAVELBOURG	1	0.740	0.740
			BIRDBEAR	1	0.580	0.580
22	21	W3	VIKING	2	0.495 - 0.560	0.528
			MADISON (UNDIFF)	1	0.503	0.503
			BAKKEN	1	0.485	0.485
26	21	W3	VIKING	1	0.420	0.420
28	21	W3	VIKING	1	0.357	0.357
32	21	W3	RIBSTONE CREEK	1	1.370	1.370
			MANNVILLE	1	0.408	0.408
33	21	W3	MANNVILLE	9	0.392 - 0.692	0.515
34	21	W3	MANNVILLE	6	0.313 - 1.020	0.806
			BIRDBEAR	1	0.300	0.300
35	21	W3	MANNVILLE	3	1.750 - 2.300	2.150
			BIRDBEAR	1	0.330	0.330
			DUPEROW	1	0.166	0.166
38	21	W3	MANNVILLE	1	0.324	0.324
40	21	W3	MANNVILLE	3	0.329 - 0.452	0.371
47	21	W3	MANNVILLE	1	0.171	0.171
48	21	W3	MANNVILLE	4	0.121 - 0.169	0.146
49	21	W3	MANNVILLE	2	0.801 - 1.140	0.971
51	21	W3	SOURIS RIVER	1	0.144	0.144
			WINNIPEGOSIS	1	0.057	0.057
52	21	W3	MANNVILLE	3	0.187 - 0.194	0.191
55	21	W3	SOURIS RIVER	1	0.185	0.185
56	21	W3	MANNVILLE	1	1.120	1.120
57	21	W3	MEADOW LAKE	1	0.130	0.130
58	21	W3	MANNVILLE	1	1.300	1.300
61	21	W3	ST. WALBURG	1	0.500	0.500
63	21	W3	WINNIPEGOSIS	1	0.121	0.121
1	22	W3	UPPER SHAUNAVON	1	0.605	0.605
2	22	W3	UPPER SHAUNAVON	1	1.050	1.050
6	22	W3	SOURIS RIVER	1	0.100	0.100
			DAWSON BAY	1	0.090	0.090
			STONEWALL	1	0.060	0.060
			RED RIVER	1	0.060	0.060
			DEADWOOD	1	1.300	1.300
7	22	W3	UPPER SHAUNAVON	1	0.435	0.435
9	22	W3	LOWER SHAUNAVON	1	1.080	1.080
10	22	W3	VIKING	1	0.530	0.530
			UPPER SHAUNAVON	1	0.745	0.745
11	22	W3	UPPER-LOWER SHAUNAVON	1	0.699	0.699
13	22	W3	UPPER SHAUNAVON	2	0.510 - 0.570	0.540
14	22	W3	UPPER SHAUNAVON	3	0.480 - 0.620	0.544
16	22	W3	MANNVILLE	1	0.760	0.760
20	22	W3	VIKING	1	0.590	0.590
22	22	W3	LOWER SHAUNAVON-GRAVELBOURG	1	0.678	0.678
23	22	W3	VIKING	1	0.460	0.460
24	22	W3	BAKKEN	1	0.430	0.430
26	22	W3	VIKING	1	0.440	0.440
			MANNVILLE	1	0.680	0.680
28	22	W3	VIKING	1	0.395	0.395
30	22	W3	VIKING	5	0.460 - 0.479	0.468
31	22	W3	RIBSTONE CREEK	1	1.740	1.740
32	22	W3	SPINNEY HILL-MANNVILLE	4	0.382 - 0.580	0.512
			BAKKEN	4	0.571 - 0.720	0.644
33	22	W3	MANNVILLE	2	0.503 - 0.555	0.529
			MANNVILLE	1	0.495	0.495
			DUPEROW	1	0.220	0.220
34	22	W3	MANNVILLE	1	0.353	0.353
39	22	W3	MANNVILLE	2	0.317 - 0.703	0.510
43	22	W3	DUPEROW	1	0.230	0.230
			WINNIPEGOSIS	1	0.055	0.055
44	22	W3	MANNVILLE	1	0.120	0.120
45	22	W3	MANNVILLE	11	0.103 - 0.714	0.288
			WINNIPEGOSIS	1	0.050	0.050
46	22	W3	MANNVILLE	2	0.130 - 0.149	0.140
47	22	W3	MANNVILLE	1	0.147	0.147
48	22	W3	MANNVILLE	1	0.145	0.145

RESISTIVITY OF FORMATION WATERS @ 20ºC

AREA TWP	AREA RGE	AREA MER	FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
51	22	W3	MANNVILLE	1	0.162	0.162
60	22	W3	SOURIS RIVER	1	0.395	0.395
62	22	W3	SOURIS RIVER	1	0.530	0.530
			WINNIPEGOSIS	1	0.120	0.120
			DEADWOOD	1	0.086	0.086
65	22	W3	MANNVILLE	1	4.300	4.300
5	23	W3	UPPER SHAUNAVON	2	0.340 - 0.614	0.477
			LOWER SHAUNAVON	1	0.352	0.352
7	23	W3	UPPER SHAUNAVON	1	0.801	0.801
9	23	W3	UPPER SHAUNAVON	1	0.690	0.690
10	23	W3	UPPER SHAUNAVON	1	0.700	0.700
12	23	W3	VIKING	3	0.560 - 0.710	0.613
			CANTUAR	1	0.720	0.720
			UPPER SHAUNAVON	2	0.600 - 0.720	0.660
13	23	W3	UPPER SHAUNAVON	2	0.590 - 0.710	0.650
14	23	W3	UPPER SHAUNAVON	1	0.780	0.780
16	23	W3	MADISON (UNDIFF)	1	0.780	0.780
17	23	W3	SHAUNAVON	1	0.680	0.680
			MADISON (UNDIFF)	1	0.720	0.720
21	23	W3	VIKING	1	0.680	0.680
26	23	W3	VIKING	1	0.570	0.570
27	23	W3	VIKING	2	0.358 - 0.580	0.469
29	23	W3	BELLY RIVER	1	2.870	2.870
30	23	W3	BAKKEN	1	0.480	0.480
			BAKKEN-BIG VALLEY	1	0.356	0.356
			BIRDBEAR	1	0.280	0.280
31	23	W3	BELLY RIVER	1	5.377	5.377
			VIKING	1	0.480	0.480
			BAKKEN	2	0.377 - 0.444	0.411
			BIRDBEAR	1	0.370	0.370
32	23	W3	BIRDBEAR	1	0.202	0.202
33	23	W3	MANNVILLE	4	0.349 - 0.365	0.353
39	23	W3	MANNVILLE	3	0.310 - 0.403	0.342
43	23	W3	DUPEROW	1	0.205	0.205
44	23	W3	MCLAREN	1	0.470	0.470
45	23	W3	WINNIPEGOSIS	1	0.055	0.055
46	23	W3	MANNVILLE	1	0.105	0.105
47	23	W3	MANNVILLE	4	0.099 - 0.120	0.113
48	23	W3	MANNVILLE	1	0.100	0.100
49	23	W3	MANNVILLE	22	0.072 - 0.250	0.109
50	23	W3	MANNVILLE	1	0.142	0.142
51	23	W3	MANNVILLE	10	0.130 - 0.300	0.195
52	23	W3	MANNVILLE	16	0.160 - 0.280	0.200
56	23	W3	SOURIS RIVER	1	0.500	0.500
56	23	W3	WINNIPEGOSIS	1	0.120	0.120
			DEADWOOD	1	0.068	0.068
58	23	W3	SPARKY	1	1.110	1.110
59	23	W3	SOURIS RIVER	1	0.725	0.725
			WINNIPEGOSIS	1	0.200	0.200
66	23	W3	SOURIS RIVER	2	0.062 - 0.084	0.073
			WINNIPEGOSIS	1	0.065	0.065
1	24	W3	UPPER SHAUNAVON	1	1.280	1.280
			MADISON (UNDIFF)	1	1.338	1.338
2	24	W3	VIKING	1	0.720	0.720
			MANNVILLE	1	1.330	1.330
			UPPER SHAUNAVON	5	1.120 - 1.560	1.384
			UPPER-LOWER SHAUNAVON	1	2.130	2.130
			MADISON (UNDIFF)	1	1.430	1.430
4	24	W3	UPPER SHAUNAVON	1	0.740	0.740
7	24	W3	UPPER-LOWER SHAUNAVON	1	1.039	1.039
8	24	W3	UPPER-LOWER SHAUNAVON	1	0.565	0.565
14	24	W3	UPPER SHAUNAVON	1	0.840	0.840
15	24	W3	VIKING	1	0.660	0.660
			MANNVILLE	1	0.880	0.880
20	24	W3	DUPEROW	1	0.177	0.177
21	24	W3	VIKING	1	0.699	0.699
			UPPER-LOWER SHAUNAVON	1	0.400	0.400
			GRAVELBOURG	2	0.350 - 0.811	0.581
23	24	W3	VIKING	3	0.505 - 0.565	0.525
27	24	W3	MANNVILLE	1	0.565	0.565
29	24	W3	VIKING	1	0.370	0.370
30	24	W3	VIKING	1	0.630	0.630
31	24	W3	BAKKEN	4	0.361 - 0.843	0.516
32	24	W3	MANNVILLE	1	0.320	0.320
			BAKKEN	6	0.287 - 0.721	0.439
33	24	W3	MANNVILLE	1	0.370	0.370
34	24	W3	BIRDBEAR	1	0.320	0.320
35	24	W3	TORQUAY	3	0.301 - 0.494	0.368
39	24	W3	MANNVILLE	1	0.202	0.202
			BIRDBEAR	1	0.385	0.385
41	24	W3	MANNVILLE	2	0.229 - 0.274	0.252
44	24	W3	MANNVILLE	3	0.140 - 0.239	0.176
			WINNIPEGOSIS	1	0.046	0.046
45	24	W3	MANNVILLE	2	0.350 - 0.540	0.465
51	24	W3	DEADWOOD	1	0.048	0.048
59	24	W3	MANNVILLE	1	1.600	1.600
1	25	W3	BIRDBEAR	1	1.120	1.120
			DUPEROW	2	1.140 - 1.530	1.335

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA TWP	RGE	MER	FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
5	25	W3	DUPEROW	1	0.940	0.940
			SOURIS RIVER	1	1.330	1.330
6	25	W3	UPPER SHAUNAVON	1	1.100	1.100
8	25	W3	UPPER-LOWER SHAUNAVON	1	0.796	0.796
9	25	W3	UPPER SHAUNAVON	1	0.910	0.910
12	25	W3	UPPER SHAUNAVON	1	0.940	0.940
			LOWER SHAUNAVON	1	0.920	0.920
13	25	W3	VIKING	1	0.980	0.980
			ROSERAY	1	0.970	0.970
			LOWER SHAUNAVON	1	1.440	1.440
			MADISON (UNDIFF)	1	0.700	0.700
22	25	W3	DUPEROW	1	0.050	0.050
24	25	W3	VIKING	5	0.510 - 0.768	0.622
25	25	W3	BAKKEN	1	0.610	0.610
27	25	W3	VIKING	1	0.400	0.400
			BIRDBEAR	1	0.230	0.230
29	25	W3	BIRDBEAR	1	0.462	0.462
30	25	W3	BELLY RIVER	1	2.710	2.710
31	25	W3	LEA PARK	2	3.800 - 3.920	3.860
			VIKING	7	0.500 - 0.600	0.524
			BAKKEN	2	0.420 - 0.510	0.465
32	25	W3	BAKKEN	2	0.550 - 0.792	0.671
33	25	W3	BAKKEN	2	0.484 - 0.540	0.512
35	25	W3	MANNVILLE	3	0.348 - 0.599	0.432
36	25	W3	BAKKEN	6	0.168 - 0.432	0.365
38	25	W3	MANNVILLE	2	0.365 - 0.376	0.371
39	25	W3	MANNVILLE	4	0.127 - 0.682	0.317
42	25	W3	MANNVILLE	5	0.130 - 0.229	0.186
43	25	W3	MANNVILLE	2	0.488 - 1.000	0.744
45	25	W3	MANNVILLE	2	0.297 - 0.300	0.299
46	25	W3	MANNVILLE	2	0.097 - 0.200	0.149
48	25	W3	SPARKY	1	0.092	0.092
52	25	W3	MANNVILLE	3	0.178 - 0.328	0.252
53	25	W3	ST. WALBURG	1	0.172	0.172
			MANNVILLE	2	0.160 - 0.212	0.186
54	25	W3	MANNVILLE	2	0.288 - 0.294	0.291
62	25	W3	SOURIS RIVER	1	0.740	0.740
			WINNIPEGOSIS	1	0.060	0.060
63	25	W3	MANNVILLE	1	1.220	1.220
64	25	W3	MANNVILLE	1	1.200	1.200
65	25	W3	MANNVILLE	1	3.200	3.200
77	25	W3	DAWSON BAY	1	0.153	0.153
3	26	W3	RIBSTONE CREEK	1	1.240	1.240
			UPPER SHAUNAVON	1	1.030	1.030
3	26	W3	MADISON (UNDIFF)	2	0.535 - 1.040	0.788
5	26	W3	UPPER SHAUNAVON	1	0.935	0.935
8	26	W3	UPPER SHAUNAVON	1	1.229	1.229
			BIRDBEAR	1	2.080	2.080
			DUPEROW	1	0.890	0.890
9	26	W3	VIKING	1	0.930	0.930
			UPPER SHAUNAVON	1	1.330	1.330
10	26	W3	UPPER-LOWER SHAUNAVON	1	1.210	1.210
11	26	W3	VIKING	1	1.200	1.200
			MADISON (UNDIFF)	1	0.950	0.950
13	26	W3	UPPER SHAUNAVON	1	1.150	1.150
17	26	W3	UPPER SHAUNAVON	1	0.790	0.790
			GRAVELBOURG	1	0.800	0.800
18	26	W3	VIKING	1	0.675	0.675
			MANNVILLE	1	0.830	0.830
			MADISON (UNDIFF)	1	0.870	0.870
24	26	W3	VIKING	2	0.320 - 0.455	0.388
25	26	W3	VIKING	3	0.450 - 0.525	0.480
28	26	W3	MANNVILLE	1	0.495	0.495
			BIRDBEAR	1	0.257	0.257
29	26	W3	VIKING	1	0.343	0.343
			BAKKEN	1	0.380	0.380
			BIRDBEAR	1	0.286	0.286
30	26	W3	BAKKEN	2	0.371 - 0.424	0.398
31	26	W3	MANNVILLE	4	0.170 - 0.365	0.298
			BAKKEN	2	0.342 - 0.350	0.346
			BIRDBEAR	1	0.164	0.164
32	26	W3	MANNVILLE	1	0.360	0.360
33	26	W3	MANNVILLE	2	0.303 - 0.332	0.318
			BAKKEN	1	0.350	0.350
35	26	W3	MANNVILLE	6	0.315 - 0.451	0.354
			BAKKEN	1	0.350	0.350
36	26	W3	MANNVILLE	6	0.322 - 0.617	0.443
			BAKKEN	1	0.500	0.500
37	26	W3	MANNVILLE	3	0.280 - 0.365	0.324
39	26	W3	MANNVILLE	4	0.127 - 0.258	0.191
40	26	W3	MANNVILLE	4	0.201 - 0.348	0.239
41	26	W3	DUPEROW	1	0.152	0.152
42	26	W3	MANNVILLE	4	0.222 - 0.365	0.278
44	26	W3	MANNVILLE	20	0.098 - 0.133	0.116
45	26	W3	MANNVILLE	1	0.183	0.183
46	26	W3	MANNVILLE	15	0.085 - 0.492	0.177
47	26	W3	MANNVILLE	7	0.104 - 0.393	0.201
49	26	W3	DINA	2	0.153 - 0.180	0.167
50	26	W3	RIBSTONE CREEK	1	5.060	5.060
			SPARKY	2	0.094 - 0.101	0.098

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
53	26	W3	COLONY	1	0.200	0.200
54	26	W3	MANNVILLE	2	0.129 - 0.246	0.188
			COLONY	1	0.196	0.196
			DUPEROW	1	0.216	0.216
			SOURIS RIVER	4	0.077 - 0.295	0.220
			SOURIS RIVER-DAWSON BAY	1	0.062	0.062
			WINNIPEGOSIS	1	0.051	0.051
			WINNIPEGOSIS-ASHERN-MEADOW LAKE	1	0.051	0.051
			RED RIVER	1	0.051	0.051
			DEADWOOD	2	0.051	0.051
55	26	W3	SOURIS RIVER	1	0.160	0.160
58	26	W3	SOURIS RIVER	1	0.162	0.162
62	26	W3	COLONY	1	0.660	0.660
			CUMMINGS-DINA	1	1.520	1.520
64	26	W3	MANNVILLE	2	4.600 - 5.000	4.800
65	26	W3	MANNVILLE	1	2.040	2.040
			WINNIPEGOSIS	1	0.048	0.048
79	26	W3	WINNIPEGOSIS	1	0.179	0.179
2	27	W3	MILK RIVER	1	0.523	0.523
			UPPER SHAUNAVON	1	1.550	1.550
			LOWER GRAVELBOURG	1	1.340	1.340
			MADISON (UNDIFF)	2	1.425 - 2.000	1.713
3	27	W3	UPPER SHAUNAVON	1	1.030	1.030
			UPPER-LOWER SHAUNAVON	1	1.400	1.400
			MADISON (UNDIFF)	3	0.620 - 1.120	0.850
			DUPEROW	1	0.940	0.940
5	27	W3	UPPER SHAUNAVON	2	0.810 - 0.955	0.883
			DUPEROW	2	0.064 - 0.320	0.192
6	27	W3	MILK RIVER	2	0.640 - 1.700	1.170
			UPPER SHAUNAVON	1	0.970	0.970
8	27	W3	MILK RIVER	2	0.425 - 0.560	0.493
			SECOND WHITE SPECKS	1	0.470	0.470
			GRAVELBOURG-MADISON	1	0.785	0.785
10	27	W3	MANNVILLE	1	0.880	0.880
			UPPER SHAUNAVON	1	1.130	1.130
			MADISON (UNDIFF)	1	0.625	0.625
11	27	W3	UPPER SHAUNAVON	1	1.300	1.300
			MADISON (UNDIFF)	1	0.803	0.803
13	27	W3	DUPEROW	1	0.069	0.069
			WINNIPEGOSIS	1	0.047	0.047
			STONEWALL-STONY MOUNTAIN	1	0.048	0.048
14	27	W3	VIKING	1	0.950	0.950
			LOWER SHAUNAVON	1	0.930	0.930
			DUPEROW	2	0.061 - 0.067	0.064
			WINNIPEGOSIS	1	0.050	0.050
16	27	W3	LOWER SHAUNAVON	1	0.860	0.860
18	27	W3	LOWER SHAUNAVON	1	0.900	0.900
			GRAVELBOURG	1	0.790	0.790
19	27	W3	VIKING	1	0.572	0.572
22	27	W3	VIKING	1	0.556	0.556
25	27	W3	VIKING	3	0.500 - 0.520	0.507
29	27	W3	BIRDBEAR	1	0.276	0.276
30	27	W3	VIKING	1	0.360	0.360
			DETRITAL	1	0.365	0.365
31	27	W3	RIBSTONE CREEK	1	0.871	0.871
			MANNVILLE	1	0.390	0.390
			BAKKEN	3	0.314 - 0.425	0.351
32	27	W3	LEA PARK	1	1.320	1.320
			RIBSTONE CREEK	1	1.920	1.920
			MANNVILLE	1	0.427	0.427
			BAKKEN	6	0.268 - 0.410	0.323
33	27	W3	MANNVILLE	4	0.337 - 0.605	0.466
34	27	W3	MANNVILLE	1	0.383	0.383
			BAKKEN	4	0.271 - 0.346	0.307
35	27	W3	MANNVILLE	3	0.308 - 0.398	0.343
36	27	W3	MANNVILLE	1	0.393	0.393
			BAKKEN	1	0.312	0.312
38	27	W3	MANNVILLE	2	0.197 - 0.290	0.244
39	27	W3	MANNVILLE	15	0.110 - 0.270	0.164
40	27	W3	MANNVILLE	4	0.113 - 0.156	0.125
44	27	W3	MANNVILLE	3	0.100 - 0.168	0.124
45	27	W3	MANNVILLE	11	0.100 - 0.267	0.145
47	27	W3	SPARKY	1	0.091	0.091
			G.P.	1	0.089	0.089
48	27	W3	RIBSTONE CREEK	1	4.000	4.000
49	27	W3	SPARKY	1	0.100	0.100
50	27	W3	SPARKY	1	0.075	0.075
51	27	W3	MCLAREN	1	0.154	0.154
			WINNIPEGOSIS-ASHERN-INTERLAKE	1	0.057	0.057
52	27	W3	MANNVILLE	4	0.102 - 0.215	0.132
53	27	W3	MANNVILLE	2	0.120 - 0.380	0.250
			DUPEROW	1	0.380	0.380
			SOURIS RIVER	1	0.120	0.120
55	27	W3	MANNVILLE	2	0.137 - 0.300	0.219
1	28	W3	VIKING	1	1.250	1.250
			MADISON (UNDIFF)	1	2.520	2.520
			BIRDBEAR	1	1.080	1.080
2	28	W3	GRAVELBOURG	1	1.500	1.500
4	28	W3	UPPER-LOWER SHAUNAVON	1	1.040	1.040
5	28	W3	VIKING	1	0.920	0.920
			UPPER SHAUNAVON	1	1.000	1.000
6	28	W3	VIKING	1	0.938	0.938
			UPPER SHAUNAVON	1	1.580	1.580
			LOWER SHAUNAVON	1	1.200	1.200
7	28	W3	UPPER SHAUNAVON	1	1.520	1.520

RESISTIVITY OF FORMATION WATERS @ 20°C

AREA			FORMATION OR HORIZON	NUMBER OF SAMPLES	RANGE OF RESISTIVITIES OHM-METRES	AVERAGE RESISTIVITY OHM-METRES
TWP	RGE	MER				
10	28	W3	VIKING	1	1.340	1.340
11	28	W3	MEDICINE HAT	1	0.680	0.680
			MADISON (UNDIFF)	1	0.850	0.850
12	28	W3	MEDICINE HAT	3	0.530 - 0.570	0.557
18	28	W3	DUPEROW	3	0.110 - 0.160	0.135
			DEADWOOD	2	0.200 - 0.420	0.310
19	28	W3	JURASSIC-MADISON (UNDIFF)	1	0.600	0.600
22	28	W3	BAKKEN	1	0.548	0.548
			DUPEROW	1	0.063	0.063
23	28	W3	VIKING	1	0.535	0.535
			BAKKEN	1	1.040	1.040
25	28	W3	VIKING	2	0.450 - 0.560	0.505
28	28	W3	VIKING	1	0.320	0.320
30	28	W3	BAKKEN	1	0.425	0.425
31	28	W3	MANNVILLE	1	0.355	0.355
32	28	W3	MANNVILLE	9	0.319 - 0.457	0.358
			BAKKEN	3	0.320 - 0.570	0.407
33	28	W3	MANNVILLE	1	0.400	0.400
			BAKKEN	1	0.336	0.336
34	28	W3	MANNVILLE	5	0.339 - 0.510	0.395
			BAKKEN	1	0.376	0.376
35	28	W3	MANNVILLE	5	0.170 - 0.616	0.366
			BAKKEN	1	0.312	0.312
36	28	W3	MANNVILLE	8	0.296 - 0.492	0.341
37	28	W3	MANNVILLE	1	0.190	0.190
38	28	W3	MANNVILLE	1	0.260	0.260
39	28	W3	MANNVILLE	7	0.130 - 0.168	0.145
42	28	W3	MANNVILLE	2	0.095 - 0.500	0.298
43	28	W3	SPARKY	1	0.097	0.097
44	28	W3	SPARKY	1	0.147	0.147
1	29	W3	VIKING	1	1.580	1.580
			BIRDBEAR	1	1.200	1.200
2	29	W3	MADISON (UNDIFF)	1	1.620	1.620
			BIRDBEAR	1	0.850	0.850
6	29	W3	MILK RIVER	1	0.730	0.730
			GRAVELBOURG	1	1.280	1.280
9	29	W3	VIKING	1	2.350	2.350
			UPPER SHAUNAVON	1	1.550	1.550
			LOWER GRAVELBOURG	1	1.380	1.380
11	29	W3	VIKING	2	1.050 - 1.120	1.085
			GRAVELBOURG	1	1.300	1.300
12	29	W3	MEDICINE HAT	1	0.462	0.462
25	29	W3	VIKING	3	0.380 - 0.410	0.397
			DETRITAL	1	0.560	0.560
			BAKKEN	1	0.465	0.465
27	29	W3	VIKING	1	0.280	0.280
32	29	W3	MANNVILLE	1	0.345	0.345
37	29	W3	MANNVILLE	2	0.233 - 0.342	0.288
13	30	W3	MEDICINE HAT	1	0.520	0.520
			VIKING	1	0.840	0.840

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